

SEPTEMBER



Leroy Mills, World's Premier Kicking Coach

1937

25c

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NEW IN CONSTRUCTION!
PERFECT IN PERFORMANCE!

The
"LAST-BILT" BASKETBALL



COACHES say
it's the game's greatest forward stride!

EVERYBODY who's seen the new "Last-Bilt" basketball agrees on *one* thing: It's the greatest improvement in ball construction the game has ever known!

And they're right. For the "Last-Bilt" is so revolutionary, so *different*, that it relegates the ordinary basketball into a class with grandfather's shaving mug.

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In the first place, its entirely new method of construction gives *every* "Last-Bilt" ball *controlled* size, weight, and shape. Each and every ball is made on a form or "last" and comes from that "last" to *standardized* measurements and rebound. There can be no variation!

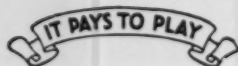
And it will outwear the old-style ball two to one! Why? Because it's absolutely free, inside and out, from stitches, seams, welts and laces. Proper performance is given with minimum internal pressure...wear is evenly distributed...flight and rebound are always accurate...and the ball *always* keeps its original shape and size.

Moreover, the bladder is actually part of the ball—free from friction and chafe.

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A.G. Spalding & Bros.



SPALDING ALSO OFFERS "LAST-BILT" CONSTRUCTION IN SOCCER AND VOLLEY BALLS

TIPS ON THE TACKLE FROM COACH KIZER

HEAD-ON TACKLE

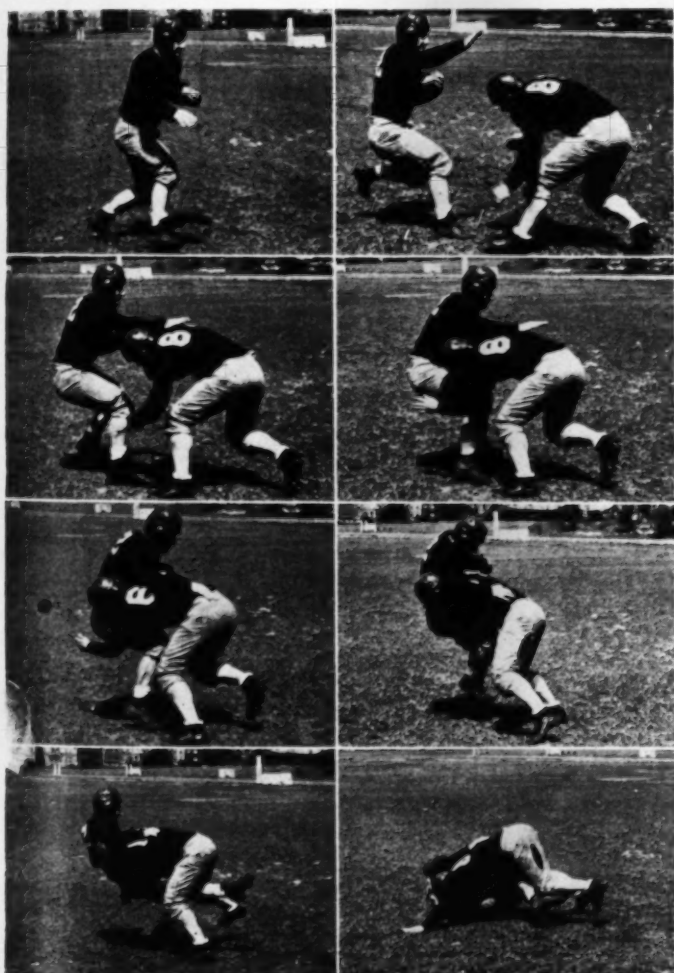
This tackle is used by linemen meeting ball-carriers coming straight through, and by backers-up whenever possible. It's the "deadliest" tackle since it stops the ball-carrier; shocks and sends him backwards. The tackler keeps his eyes fixed on the ball-carrier at all times; drives at him, helmet into the pit of the stomach with neck held rigid to prevent injury. The tackler's head is aimed into the ball-carrier's stomach but will not always strike there, nor stay there when it does strike. Any slight shift made by the ball-carrier causes the tackler's head to slip to either side, and this is all to the good. The tackler then drives right through on his shoulder, "widened" by raising his arm on that side.



NOBLE KIZER
Football Coach
Purdue University

CROSS BODY BLOCK

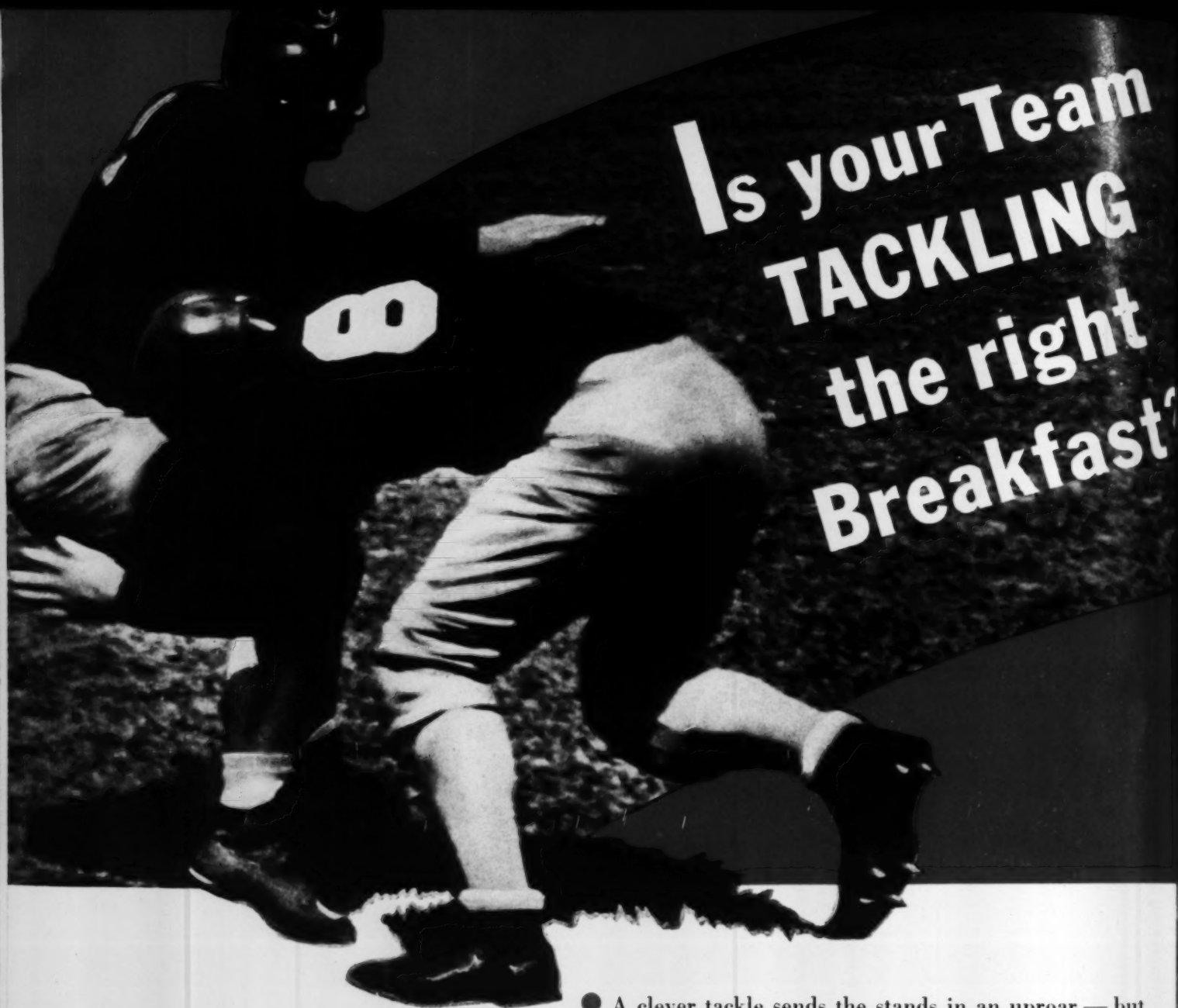
One of the primary blocks of football having many variations is the cross-body. Shown here is the basic block, from which all others are derived. The fundamentals of this block apply to all the variations: (1) get within arm's length of opponent before "putting the block on him"; (2) keep eyes on opponent until last possible moment; (3) keep back straight and head up so that neck and back are in line, with neck held rigid for safety's sake; (4) strike opponent above knees and stay with him, using arms straight down to permit "crab-walk" to maintain the contact; (5) hook inside (forward) leg around to back of opponent's leg, thus providing further clamp on him.



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AND ENDURANCE . . .**

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Breakfast?

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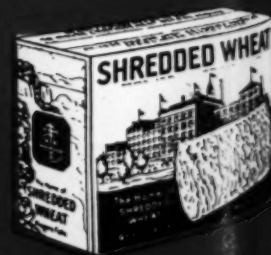
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COACH FAULTLESS

New achievement in construction makes this supporter more resilient and comfortable. Can stand a great many washings.

While our general line of Coach Supporters is made from strong elastic strand webbing, Coach Faultless differs in that it is the only supporter containing a flat band of live sheet rubber in waistband and leg straps, encased in resilient woven webbing. Waistband 3"; Leg Straps 1 3/4". Large, Medium, Small.

Exclusive with Johnson & Johnson.

The wide range of styles of Coach Athletic Supporters made by Johnson & Johnson is suitable for athletes in every field of sport.

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Send coupon below for copy of "Aids for Athletes". Contains illustrated description of the complete line of Johnson & Johnson Coach Supporters and valuable information regarding the latest technique in preventive taping.

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Please send me your illustrated book "Aids for Athletes", used by hundreds of Coaches and Trainers.

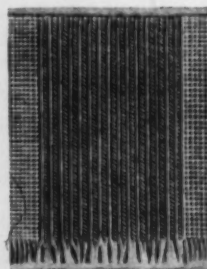
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Waistband and leg straps of Coach Faultless consist of a flat band of live sheet rubber, encased in resilient woven webbing. Illustration shows details of new construction. Contrast this with construction of webbing shown below.



This picture shows construction of waistband made from elastic strand webbing. The pressure leaves marks upon the skin and the webbing deteriorates more readily.

SPORT GLEANINGS

From Chattanooga, Tenn. comes a report that Forrest "Spec" Towns, Olympic hurdling champion, dismayed at the dearth of two-legged competition stepped out and out-galloped a quadruped—Tommy Roberts, a prize cavalry horse. The match, not of international flavor, was part of a field day program at Fort Oglethorpe, where the star hurdler is a C.M.T.C. enrollee.

The race was over a 120-yard course with Towns taking the low hurdles and his worthy opponent doing five high hurdles. The winner, timed in 13 seconds flat over a rain-soaked turf, staggered over to an A.P. reporter after the race and panted, "After stepping into a hole between the fourth and fifth hurdles, I heard the horse pounding on my heels. Believe me, I had to step to nose him out." The horse had nothing to say for publication, but lovers of horse flesh on the sidelines claim the nag was a poor mudder. Towns may be an added starter at the next Kentucky Derby.

George Wright, one of baseball's early pioneers and called "the grand old man" of the national pastime, passed away at the age of 90 late last month. Wright was one of the few remaining links with the era of handle-bar mustaches, razorlike spikes and gloveless catchers.

He was captain of the first professional baseball team, the Cincinnati Red Stockings of 1869, and founded the Boston National League club (1871) and the sporting goods firm of Wright and Ditson. He was also credited with introducing golf to New England, if not to the entire country. Mr. Wright held the first lifetime pass issued by the National League.

On a junket of Europe with American track and field teams, two United States athletes smashed world's records last month. At Stockholm, Melvin Walker of Ohio State University high jumped 6 ft. 10 in. to better the mark of 6 ft. 9 29/32 in. which he had created earlier the same week. Both heights top the accepted world's record of 6 ft. 9 3/4 in. held jointly by Cornelius Johnson and David Albritton.

Ben Johnson, Columbia University track captain and I.C.4A. sprint champion, reeled off a 10.2s. for 100 meters that cracked the 10.3s. mark shared by such former sprint luminaries as Percy Williams, Eddie Tolan, Ralph Metcalfe, Eulace Peacock, and Christian D. Berger.

Don't look now, but that man hiding behind the dense foliage is Larry Kelley, just back from a trip abroad and raring to go against the professional opponents of the various hand-picked college teams on which he is going to play. The irrepressible Yale pass-snaring specialist explained that the Emile Zola trimmings were the result of a bet made in Munich with some Eli classmates. If he doesn't watch out they'll make a wrestler out of him.

A BASKETBALL PLAYER IS ONLY AS GOOD AS HIS FEET!



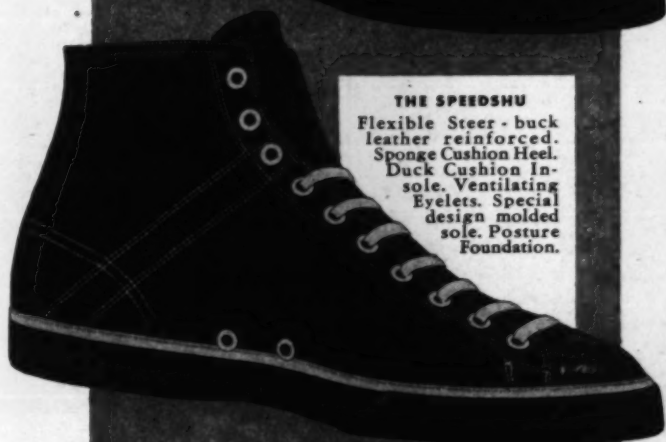
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Two-ply heavy army duck. Loose lining. Shaped padded tongue. Sponge Cushion Heel. Duck Cushion Insole. Ventilating Eyelets. Molded Sole. Posture Foundation.



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Pliable leather uppers. Sponge Cushion Heel. Cushion Insole. Ventilating Eyelets. Molded Sole. Posture Foundation. New design, shaped, padded tongue.



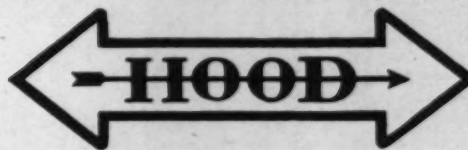
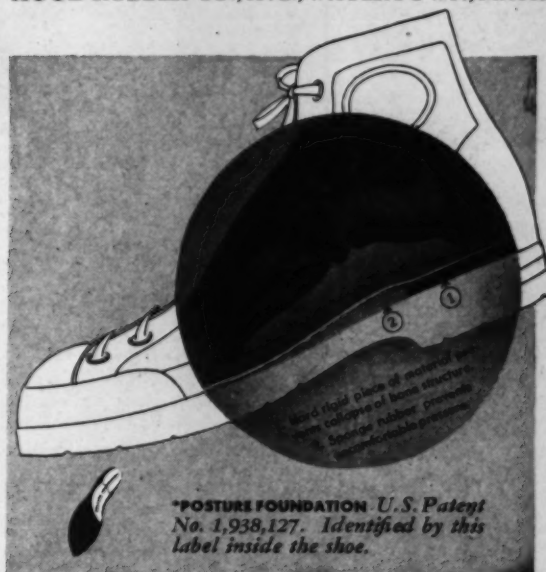
THE SPEEDSHU

Flexible Steer-buck leather reinforced. Sponge Cushion Heel. Duck Cushion Insole. Ventilating Eyelets. Special design molded sole. Posture Foundation.

THROUGHOUT a game and throughout the season, a basketball player must maintain his speed and leg-power to keep winning. No wonder so many teams prefer Hood Athletic Shoes with Posture Foundation!

Posture Foundation gives your players complete foot-protection—keeps them fresh enough for a driving finish in a close, hard-fought game. This patented* feature actually provides "insurance against tired legs, fallen arches, and flat feet."

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ATHLETIC FOOTWEAR

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Please send me.....copies of the 1938-39 Basketball Hints for my squad.
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The Name of our Sporting Goods Dealer:
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A NEW RIDDELL SEAMLESS AND LACELESS BASKETBALL

THIS METHOD OF BALL MANUFACTURING
PRODUCES:

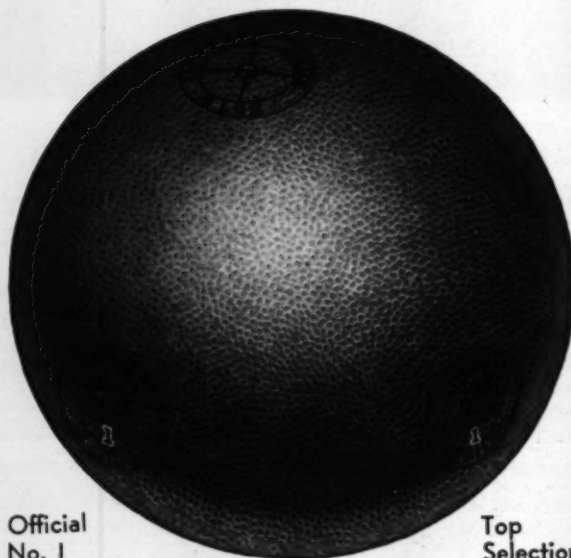
- **A ROUNDER BALL.** Pre-stretching and pre-forming of parts produces a rounder ball.
- **A STRONGER BALL.** Laminating and vulcanizing of all parts so to reinforce each other produces a tougher, stronger ball.
- **A BALL THAT HOLDS ITS SHAPE AND SIZE.** Being of stronger fabrication and all parts being pre-stretched and formed, ball should keep its size and shape until cover is worn off. Since ball requires less air pressure, the strain on its panels and seams is greatly reduced, thus increasing the life of the ball.
- **A BALL IN WHICH ITS LIVELINESS CAN BE BETTER CONTROLLED.**

THE GAME OF BASKETBALL CAN BEST BE IMPROVED by applying finer measurements to ball bounce, to dead spots, and to shape. A ball dropped from a fixed height on a solid spot should be required to rebound to a certain height as a standard for game use.

This ball, because of a stronger and livelier shell, requires less air pressure than the stitched ball to produce the same liveliness and feel. This ball does not feel soft at six pounds air pressure and is as lively as the stitched ball.

This ball, because it permits of greater range of air pressure without affecting the feel of the ball, permits of closer measurements as to bounce for game use. More accuracy on this point will permit of easier control in dribbling and more accuracy in bank shots.

In athletics the proof of the pudding is in the eating. TRY one and be convinced.



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Top
Selection

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THE FAMOUS RIDDELL 56

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IMPORTANT FEATURES OF THE 56

- Light - weight, Athletic Tanned Leather Upper.
- Improved Shock-Absorbing Innersole.
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- Raised Heel.
- Welt Construction—Can be resoled.

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Give Riddell shoes a chance to sell themselves. Put on a pair and get the fit and feel; you will want no other kind.

Our line has a complete range of styles and prices.

Remember, too, that Riddell had the first successful interchangeable cleat shoe. The workmanship and construction of every shoe, regardless of price, is perfection—the result of years of practical coaching and manufacturing experience.

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SCHOLASTIC COACH

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SCHOLASTIC COACH is issued monthly ten times during the academic year (September through June) by Scholastic Corporation, M. R. Robinson, president, Publishers of *Scholastic*, the American High School Weekly; issued in two editions, one for students and one for teachers.

Address all editorial and advertising communications to SCHOLASTIC COACH, 250 E. 43rd Street, New York, N. Y.

G. Herbert McCracken, publisher; S. Z. Oppenheim, advertising manager; Western advertising manager, Robert S. Wright, 35 East Wacker Drive, Chicago, Ill.; Pacific Coast Rep., E. S. Townsend, Russ Bldg., San Francisco, Calif.

Subscriptions for the United States and Canada, \$1.50 a year. Foreign, \$2. Back issues: 25 cents, current volume; 50 cents, previous volumes. All correspondence concerning subscriptions and circulation should be addressed to Circulation Department, Chamber of Commerce Bldg., Pittsburgh, Penna.

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170 pounds of sinews, bone and muscle. A momentum that results from multiplying this weight by the speed of a 10-second runner. And then a sudden stop, a start, a grueling jerk, a wrenching twist and turn. And all of the cruel strain taken up by cleated shoes.

Shoes for championship play must be strong to safeguard the ankles of the runner, and yet they must also be light and pliable to make possible that speed and subtle footwork he must have to be elusive. Kangaroo leather is 17% stronger weight for weight, than any other leather known. It is soft and pliable.

Counting eight years as an athlete's active life, six generations of athletes have paid tribute to the value of Kangaroo. And remember: shoes of "kangaroo horse", "kangaroo sides" and "kangaroo calf" are not Kangaroo.

KANGAROO

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An Open Letter to All Coaches !!

Midland Chemical Laboratories, Inc.
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Is it slippery?

Does it rubber-burn?

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If the answer to any one of these questions is "Yes" then you will be interested in Midland Gymlohn.

This is a special gymnasium finish containing a Bakelite resin which presents a resilient, non-slippery coating of unusual hardness and resistance to the tremendous traffic to which gym floors are subjected.

We will enjoy hearing from you.

Cordially,

Floor Maintenance Division

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DUBUQUE IOWA

Here Below

Flocking to the Mills Kicking Shrine Comes an Army of Potential Punters

WATCHING Leroy Mills, the nation's No. 1 kicking coach, demonstrate his art of purposeful punting, one is likely to come away with the impression that the first fundamental in acquiring pedal control over the obstinate prolate spheroid is in some way connected with pipe-smoking. Or, at least, pipe-clutching. The Mills meerschau is rarely seen to serve the purpose for which it was made. True, Mr. Mills, during the course of a demonstration-lecture, will frequently ask for a match. He will ask for as many as a dozen of them, and each he will faithfully strike and apply to the bowl jutting out from the left (never the right) corner of his mouth. But nothing ever comes of it. No smoke. And, as far as can be determined, Mr. Mills doesn't seem to be aware whether he's got a light or hasn't.

We once knew a basketball player who smoked a cigar during a game, and the referee was at a loss to know what to do about it. The point was not covered in the rules.

Referees are not likely to be faced with the problem of handing down a decision in the case under question, for Mr. Mills is not scrimmaging these days. He had his fling at Princeton back in 1904 and '05. It is perhaps inaccurate to suggest that Mr. Mills is through flinging. There is perhaps no more active (and we mean active) figure in football today.

His travels on behalf of American football per annum add up to a mileage far greater than even the Notre Dame football team was ever known to have covered in its most itinerant mood. And Mr. Mills does it all for the love of the game. His profession is the law, he uses football to keep young,



Threading the needle! Leroy Mills drop kicking a goal from a point less than 1 yard out.

IN THE library of his home the other evening (where he was demonstrating a drop kick for our benefit) he dropped the suggestion that he wasn't as fast on his feet as he used to be. Since we didn't know him in 1905, we couldn't tell. He looked fast enough to us, pivoting and pirouetting with perfect balance on the slippery hardwood floor, and lifting a small but exceedingly accurate drop kick from the library out into the dining room, over the table and out the window which he had opened for the occasion. Mrs. Mills was upstairs while this was going on, but evidently she has perfect faith in her husband's control, for the cut glass was in its proper place on the buffet, and a vase of flowers dec-

orated the center of the table. For the next demonstration (which was a multiple kick, with ourself holding the ball), we committed a social error of the most flagrant sort. We suggested that the vase be removed. Mr. Mills was shocked at this suggestion of failing confidence in him, so we hastened to explain that what concerned us was our own unsteady hand.

At the mention of flowers, Mr. Mills was off in another direction, as he called time out for light refreshments.

"Come upstairs, I want to show you my garden," he said.

We don't recall ever having gone upstairs to see a garden, but strange things were happening this

night, and we were by now in the mood for anything.

Mr. Mills escorted us through his second-floor den. There, outside, poking its great golden face into the window, was the largest sunflower we had ever seen. It is probably the largest in the world. Mr. Mills didn't intend it to be. In fact, he isn't especially fond of sunflowers; prefers portulacas, Sweet William and delphinium.

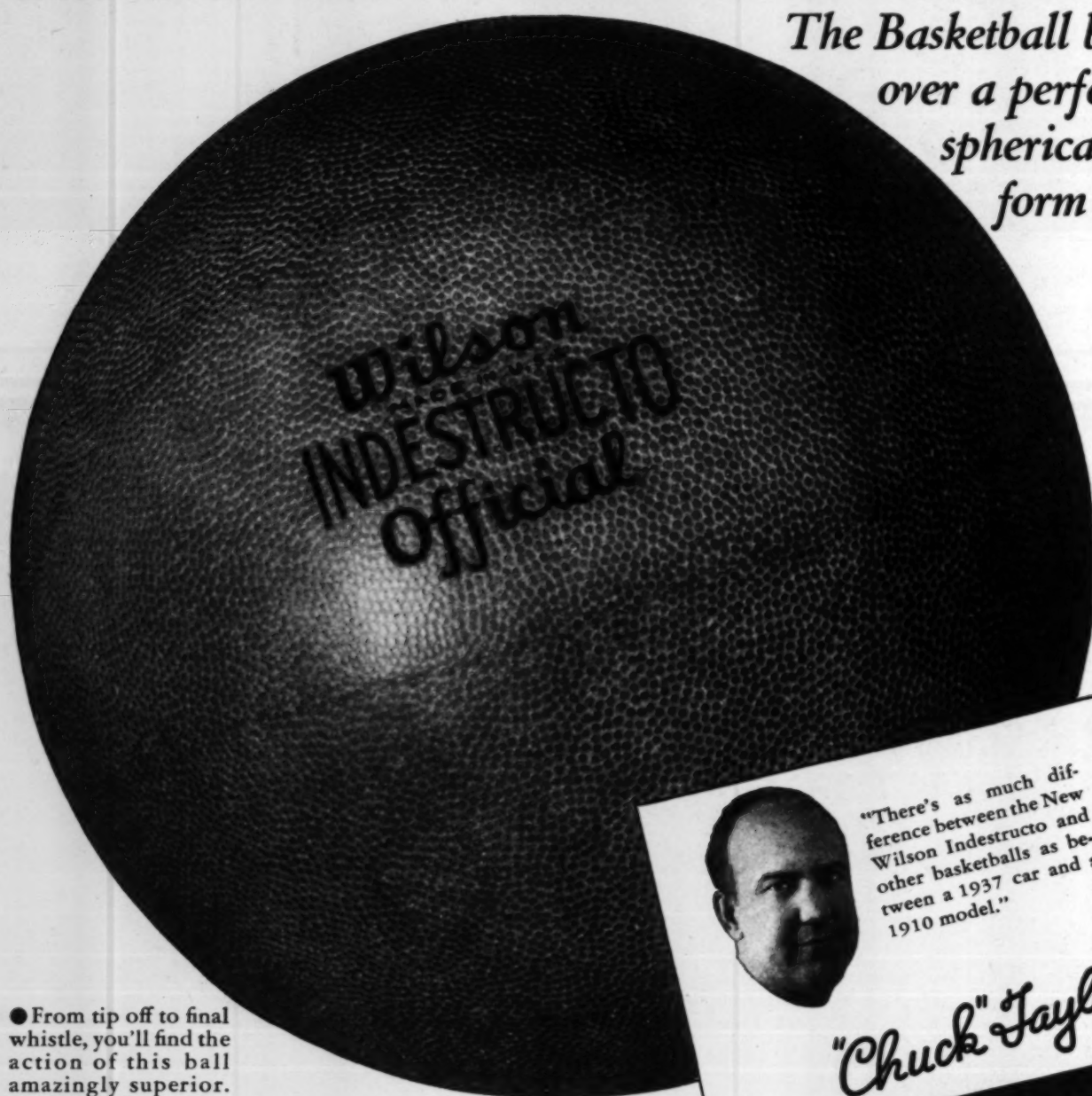
"I never even planted the thing," he said. "It was an act of nature." Still, it was an impressive flower.

We weren't the only visitor in the Mills household. It seems that one is never the only visitor there. Kickers come from far and wide to get the benefit of Mills' coach-

(Continued on page 31)

MAKE YOUR PLAYS CLICK WITH *The New Wilson Indestructo "Last Bilt"*

*The Basketball built
over a perfect
spherical
form*



● From tip off to final whistle, you'll find the action of this ball amazingly superior. Every Indestructo Basketball is perfectly round—perfectly uniform in size, weight and balance—because each one is molded over a spherical form or "last." Bladder and cover bound together in an inseparable unit... not a stitch, seam, lace or other foreign influence to interfere with accurate flight and true rebound from the backboard or floor. The selected cowhide pebble grain cover wears uniformly, retaining perfect "finger feel." Give your coaching skill a break by adopting this great ball for 1937.

Men mentioned are retained on Wilson's Advisory Staff

"It pays to play."

Wilson

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"There's as much difference between the New Wilson Indestructo and other basketballs as between a 1937 car and a 1910 model."

"Chuck" Taylor



"The basketball of the future is here today—it's the New Wilson Indestructo Basketball. Costs less because it plays longer."

Geo. E. Keogan

KICK IT WHERE YOU WANT IT

By Leroy N. Mills

The famous kicking specialist regards the punt as an offensive weapon, to be accurately used

KICKING a football looks and it really is simple, if it is understood and a few simple fundamentals are mastered. One cannot build a house by starting with the attic. This really is what has been done in the past by most kickers and their coaches and that is why kicking as a whole is so inaccurate and generally used as a last resort.

The game of American football originated from the English game of Rugby which is played with the same shaped ball, although every other ball game is played with a round ball. Kicking was, and is, a main factor in this English game. In Rugby

everybody kicks, not only as we do, but usually on the run. As the American game developed through the stages of the rushing, running and finally the passing features, kicking became the forgotten factor as an offensive measure.

For years, and particularly since forward passing came into the game, kicking was used as merely a defensive measure and only when other offensive measures had been stopped. A team kicked only because it had to. The opponents would be in their best positions and prepared to receive the kick. The disadvantage was never really understood, because in its turn the opponents did the same thing. It was done because there were very few players who could kick with any real control or accuracy and it was believed that unless a boy was born with the ability, he could not be taught.

Here are a few axiomatic facts affecting kicking. The field is 100 yards long and 53½ yards wide. A good safety man who knows a kick is coming and is 40 yards back in the middle of the field can cover 20 to 25 yards on either side. Thus he can cover practically the whole middle backfield. Good ends can cover about 40 yards from scrimmage line, so a longer kick to a good safety man is dangerous. For instance, Clark of Navy's 70-yard kick in the 1933 Army-Navy game was run back by



TOP: The author holding the ball as he recommends it should be held for punting, with the right hand under the ball and the left hand in front. The left merely steadies the ball and is the hand to be removed first as the ball is lowered to the foot. **LEFT CENTER:** The white line, painted along the under seam, aids the pupil in placing the ball properly on the right hand. The ball should be placed so that this seam runs directly along the line of the middle finger. **RIGHT CENTER:** This shows the actual placement of the right hand on the ball. Kickers should get used to quickly adjusting the ball in the right hand. **BOTTOM:** The ball as it fits on the instep of the foot for the end-over-end punt. Properly placed the ball will balance itself perfectly without falling off.

Army's safety man, Johnson, for a touchdown and the ball game, because it went right into Johnson's hands, many yards ahead of the Navy ends. The following year, in rain and mud, Clark kicked out on Army's one-yard line from the center of the field, which led up to Navy's winning placement goal from the field. This dramatically portrays the two theories of kicking, as the former kick helped lose the game for the kicker's side, and the latter helped win it.

The average distance of defensive kicking is 30 yards from the scrimmage line. The average runback is

about 10 yards, making a net kick of 20 yards. The average amount of kicking per game is 12 punts per team, which means a total runback of 120 yards, or 20 yards over the length of the field. Now, if one side gives this handicap in a

game and the other side does not, the latter should win, if it is playing in its class. If the latter team has a trained kicker who can control his kick as to direction and "kick 'em where they ain't," not only does it neutralize this handicap, but a real deciding advantage follows.

Football begins at 30-yd. line

The spot quick kick should air-carry at least 35 yards from scrimmage line. It is unexpected and aimed at a predetermined and undefended spot, to which the kicker's end can arrive in time, and the safety man cannot. If properly kicked, it has a roll of at least 25 yards, or a net 60 yards of gain of position. The ball game generally commences at the 30-yard line, to where the ball is usually run back on the kick-off. Sixty yards from this point is inside the opponents' 10-yard line. The great advantage of this position is too apparent to need discussion and the whole game is then and there affected by the strategic position of the kicking team at the very start of the game.



Teaching a beginner

Before teaching a beginner how to kick, it is wise to bear in mind and explain the following axiomatic facts:

(a) Kicking can be reduced to its two simplest factors, i. e., the ball and the kicker.

(b) The football is the only game ball that is not round and the only ball, therefore, that has two main axes; thus the only ball that can become an end-over-end or a spiral.

(c) The kicker is the only athlete who is obliged to do his work under pressure while standing on one foot and therefore requires a better balance than any other.

(d) The spiral punt or pass by the right-footed kicker, passer or center rotates from right to left, and of course, from left to right for the left-

footed kicker, center or the passer.

(e) There is no one who is *naturally* balanced perfectly, whether on two legs or one.

(f) The balance foot of the kicker points to some degree to the left of the right-footed kicker, and this causes a drift of the ball in these directions, because the right foot pulls over in the kicking to the left.

The following few simple fundamentals underly all types of kicking, as well as most other athletic skills. They are in their general order:

Balance. No one is perfectly balanced. Most people are overbalanced backwards. A sensitive balance may be evidenced by a tendency to seasickness or dizziness. Everyone can acquire a better balance than he has. Proper allowance must be made by each kicker for his defects of balance. Head injuries and high fever illnesses are apt to have affected the nervous organs of equilibrium and therefore

the balance. This back balance is what causes the loss of roll and even a backward roll at times, due to the pull, or drive given the kick. Whenever the kicking foot ends up back of the balance foot, this is evidence of that backward pull. All right-footed kickers naturally pull to the left, causing the ball to drift

to the left. This must be understood and allowance made to correct it by aiming as much to the right as the kicker naturally pulls to the left. This is why most goals are missed to the left, and attempted right-hand coffin corner kicks result in touchbacks. The left foot, in the case of the right-footed kicker, is the aiming and balance foot, and controls direction. It should always be pointed at the spot you wish the ball to go. The left-hand coffin corner is the easiest corner of the field for the right-footed kicker to kick into, because of his natural stance and the fact that his left foot will point into that corner; and the right hand, holding the ball, will point likewise. That is why the left-footed kicker is more valuable for right-hand coffin corner work. He is "a natural" to that corner. Of course, proper allowances should be made for the left or right pull, as the case may be, and for any adverse wind conditions. If a right-footed kicker punting toward the right side knows that he pulls the ball five yards to the left on a fifty yard kick, he should naturally aim five yards to the right of the five-yard side-line point so as to go out of bounds at the five-yard line.

Holding and aiming the ball. The football acts like a projectile. It is pointed and shaped like one. Just chalk an arrow on the upper point of the ball so you can aim it. Balance the ball, lacing up, in your right hand, middle finger under the lower middle seam, so that the ball will respond to the movement of the middle finger if you wish it pointed up or down, right or left. Up and down for the high or low kick, and

Spot Kick to Left

The kicker, the instant he receives the ball from center, takes a quick, final glance at the position of the defense, and then proceeds with the business of kicking the ball, never again looking up. "Trying to look at something else while kicking a football has lost many games," Mr. Mills says in this article. Note that he practices what he preaches, and even after the ball is "out of the picture," his eyes are still fixed on the point where the ball and foot made contact. Mr. Mills corrects a natural left pull tendency by turning out his right foot on the first step. Note that the ball is not put or tossed ahead of the point reached by the balance foot in completing its first step. The ball is dropped straight down so that it passes directly opposite the balance leg, even with the knee. The apparent extreme lean of the body in the next to the last picture is a camera exaggeration, due to the angle from which the pictures were taken.





right or left for its direction. Get used to adjusting the ball quickly in your right hand; then as you kick, place the left hand over the front of the ball just to steady it. As the ball is lowered to the foot, the left hand comes off, but the ball still remains properly balanced and aimed so that it can be dropped without change of position to the kicking foot. The ball is dropped simply by withdrawing the hand from under it. Holding the ball this way your kick should never be blocked, for you can change this kick into a pass or run up to the instant of lowering it down to your foot. This method of holding is the real safe way for the running kick when used on the return kick of punt or kickoff. By this method of holding the ball, the kicker can produce the kind of punt he wishes and control its height and direction at will. Aim the ball at a fixed visible target in order to get accurate direction.

Eye on the ball. This is a necessary thing in all ball games. Trying to look at something else while kicking a football has lost many games. You must do all your looking at the goal post, your targets, or your opponents before you actually kick. Practice until it is second nature for you to look at the ball while kicking, no matter what happens.

Follow-through and timing. It is the follow-through, and not brute force or leg drive, that makes for distance, and accurate kicking. The ball is simply and easily dropped from the hand to the foot in position for the type of kick desired, already aimed, and then the foot contacts the ball without smashing it, and in proper timing. The

length of the follow-through determines the distance of the kick. The swiftness of the follow-through controls the speed of the kick.

Timing is the sixth sense, if a football man may be permitted this little scientific leeway. If you lack timing completely you cannot become an accurate kicker. Your ability to dance, sing, carry rhythms, play golf or tennis all indicate that you have some timing. Don't worry, most all of us have timing which can be improved. Only about one out of a thousand are born without any timing sense but very few of us are timed so well that we do not need constant practice to improve it in kicking. The lack of timing in a kicker is as fatal as color blindness would be to a railroad engineer. The real difference between such stars as "Babe" Ruth, William Tilden, Robert Jones, "Red" Grange and us ordinary people is only in such simple things as natural timing, balance and coordination. I believe from my experience that most any boy can become a pretty good kicker if he has the ambition to be one and the will to work. No one will get more out of anything than what he is willing to put in. You should first know yourself and your faults.

We classify kicks into the following groups:

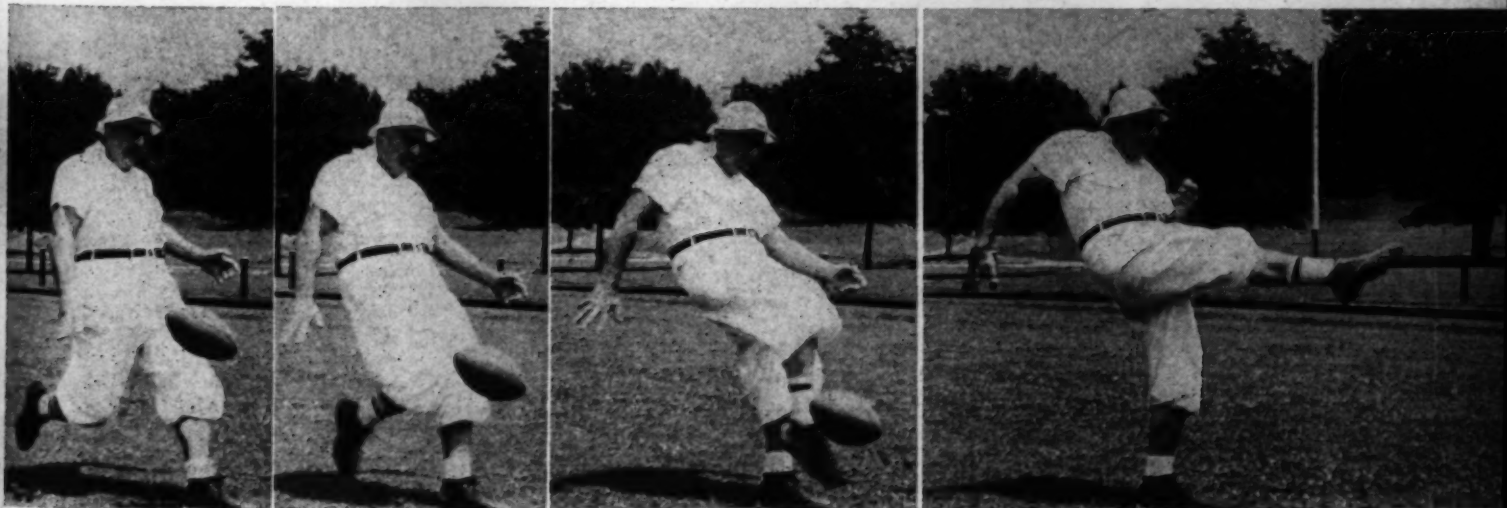
The Quick Kick

The "surprise" or quick kick is not the dangerous weapon many commentators have made it appear. Like anything else, it is dangerous in the hands of an incompetent player. Any punter can be trained to execute the quick kick and do it with the same assurance and success that marks his regular punting. The quick kick is one of the strongest of offensive weapons, and it is an extravagant coach who does not develop it for all it is worth. The strategic time for it is when the defensive secondaries are up close and when the wind is not too strong against it. The pictures above offer an excellent study of the correct mechanics of the quick kick. The kicker's footwork leaves him no nearer the scrimmage line at the end of the quick kick than he was when he received the ball from center. The quick kick is a low kick (as indicated by the straight-in-line toe and instep), and may be kicked either end-over-end or spiral, depending on the ground reaction desired.

- (a) Punts; ends-over-ends and spirals
Used for quick kicks, coffin corner, running and multiple kicks.
- (b) Drop kicks and place kicks; all ends-over-ends
Used for points after touchdowns, goals, and kickoffs.
- (c) Multiple kicks; generally ends-over-ends
Used only as a punt.
- (d) Running kicks; ends-over-ends or spirals.

The Punt

The punt is the act of kicking the ball dropped from the hand. To be a really effective weapon, the punt should be unindicated, preferably a quick kick on an early down and in the early quarters of the game. It should be of low trajectory, placed where the safety man is not, should roll



out of bounds if kicked from a 60 yard distance; otherwise it should roll into the 10-yard side-line zone and stop. A coffin corner kick does the most damage. The defense on an early down should be drawn over to the side of the field so as to leave the side to be kicked into open and with the wind, if any. The kicker should not carry the ball or block on the preceding play. He should be careful not to pull his kick by falling backwards while kicking so that his kicking foot ends up in back of his balance foot. He should not leap off the ground while kicking and should take no more than a step or a step and a half, and if possible, should have his balance foot solidly on the ground when kicking. The ball should be aimed at a predetermined target, outside the playing field and aimed to the right or left of this target to compensate for the individual's natural pull or draw. The end-over-end kick is obtained by contacting the under middle seam of the ball with the middle of the instep of the kicking foot. The spiral is obtained by contacting the ball so that the middle of the foot really bisects the under seam of the ball. With a right-footed kicker the ball should be pointing to the left and with a left-footed kicker to the right. Therefore, the natural coffin corner for the right-footed kicker is the left one.

The Quick Kick

The quick kick is best executed by having the kicker take one step back with his kicking foot, then a step with his balance foot to bring it back of the kicking foot. Aim the balance foot at the target, and when the heel of the balance foot meets the ground the center should pass the ball. It is kicked, therefore, before the opponents can break through, as they are held on the scrimmage line until the ball has been passed.

Place Kicking

In place kicking the ball-holder



ABOVE: As important as the kicker in the placement kick is the holder. Here we have him up on all twos, ready to be of service if it is a field-goal attempt and plans go astray. The ball is being held for a right-footed kicker. In the top picture, it is held for a shorter kick of high trajectory. The ball is given a greater lean for a long kick of lower trajectory (bottom picture). Note the placement of the fingers: this affords much better control than the one-finger and fingers-on-tip methods.

should receive the ball, aim it for the kicker by using crossed lines on the ground, one for direction and the other for place of kick. The center should get the ball into the holder's or kicker's hands for place kick, punt or drop kick with the lacing facing up. This he can do by practice at the different required distances and adjusting the lacing and his speed on passing.

The average distance kick-off goes down the middle about 50 yards to the 10-yard line, is caught and run back to the 30-yard line where the kicking team stops the receiver and the ball game commences. The receiving team has prepared itself for the middle lane return and is not well prepared elsewhere. It is wise not to kick-off down the middle but to the spot where the best receiving man cannot cover. There are plenty of these spots. The direction of the kickoff should not be indicated until it is too late for the receiver to change his position. This year the rules make accurate, controlled kick-offs more important than ever, as an out-of-bound kickoff now goes to the receiving team on its 35-yard line.

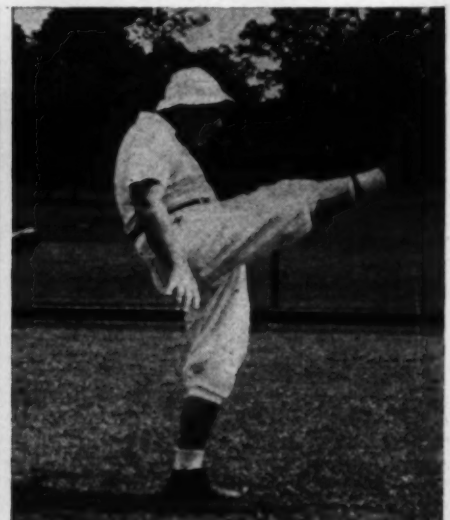
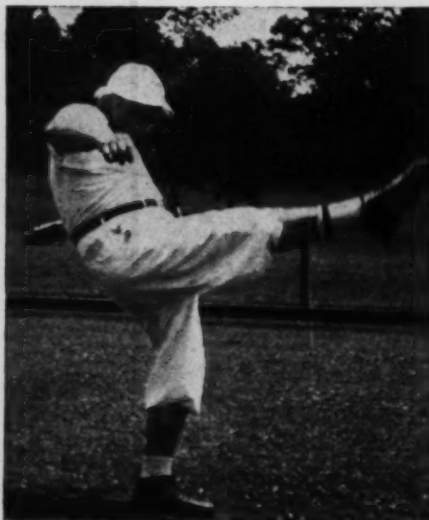
In general

Do not try to take the cover off the ball. Wear light shoes with short front cleats. Do not let your sock on the kicking foot overlap the shoe. Lace the kicking foot shoe flat and tie on the side or in back. Take care of the health of your feet and keep them free from bruises, cuts and infections. Do not step on the end zone line while kicking or you will score a safety. Develop accuracy in short kicks first, and then go into long ones. Obtain accuracy and distance will follow.

Accurate kicking can be better taught to the high school boy than to the college man. Almost any boy can be taught to kick properly. The boy will have a lot of fun kicking a football even after his playing days are over and in teaching others. The future
(Concluded on page 32)

These three pictures offer a comparative study of elevation of the leg and turn of the toe in three types of kicks: (1) the follow-through of a spot kick, which is a kick of low trajectory; (2) the follow-through

of a high, distance kick, the long follow-through connoting distance; (3) the follow-through of an excessively high kick that has only moderate distance.



From Coaching School Notebooks

J. B. "Jock" Sutherland

Reported by Joe Stanczyk
Admiral Farragut Acad.

AT THE Northeastern Coaching School, Dr. John Bain "Jock" Sutherland diagrammed and described with the great fidelity to detail which is characteristic of his coaching, the key plays of the Pittsburgh attack.

Sutherland operates mainly from a single wingback with an unbalanced line and the weak side end split. The wingback is a yard out and back from his end. The quarterback lines up directly behind the left foot of the outside (right) tackle and just far enough back to touch his tail. The fullback takes his stand three yards directly behind the right guard. The tailback is four to four and a half yards behind the left foot of the center and about one yard away and back from the fullback.

With the exception of the outside tackle, right end and center, the linemen, on offense, assume a stance with the right foot back. The outside tackle and end keep the left foot back while the center's stance, of course, varies with the formation. Pitt linemen in pulling out of the line use a peculiar pivot crossover step very much unlike the diagonal step back employed by most teams. Sutherland believes his linemen pull out a split-second faster by pivoting on the back foot and crossing over with the foot farthest removed from the direction in which the lineman intends to go.

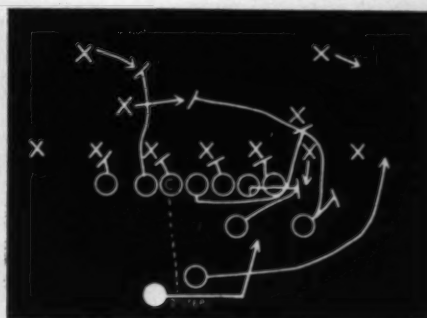


Diag. 1

The off-tackle play (Diag. 1) has been the keystone of the Pitt attack since the days of "Pop" Warner. On this play the wingback and right end team up on the defensive tackle and drive him cleanly out of the play. As the end throws a pinch block on the tackle (hooking the left leg around his opponent's knees), the wingback takes one step to the outside, feints and drives to the inside of the tackle where he shoulder blocks. The guards pull out and mop up on the secondary, the weak side guard cutting down the defensive

left halfback and the right guard taking the first man in the backfield. The quarterback maneuvers his head to the inside of the end and rides him out with a shoulder block. After taking three steps toward the end, the fullback steps inside and goes through the hole shoulder to shoulder with the left guard.

Beginning with a cross-step the tailback (ball-carrier) takes four steps to the right, picks up his interference and cuts quickly through the hole. It is important for the ball-carrier to go out straight on his four initial steps and not drift back or approach the hole at an angle. If he drifts he may come up to the hole too late, and by heading straight for the hole he will probably find himself running up the backs of his own guards, giving the play away at the same time. The ball-carrier should fake a sweep by looking out beyond the defensive end, then suddenly swerve and race outside of tackle.



Diag. 2

Mouse-trap on tackle

In Diag. 2 Sutherland lures the defensive strong side tackle in, mouse traps him and runs a play between tackle and guard. As the unsuspecting tackle is let through, the right end moves over to crack down on the defensive strong side guard. Meanwhile the quarterback sets up the defensive tackle for the outside tackle who crosses over on a parallel line and removes him from the play with a side-swipe. The left guard sprints directly down-field for the halfback, and the right guard pulls out, runs through the hole and takes out the strong side backer-up. If the wingback can wall out the end with little trouble, he can cut across for the weak side backer-up. The fullback starts out for the end, swings around him and goes down-field for the left halfback. Making the play look like an off-tackle smash or an end run, the tailback takes two diagonal steps and smashes inside tackle.

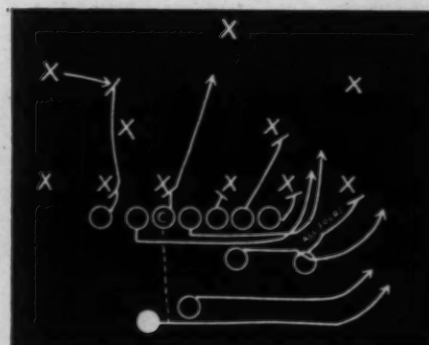
The inside tackle check play (Diag. 3) is an excellent play to work against a smashing end. Again the tailback takes two steps to the right, pivots and starts for the hole at tackle. But this time he suddenly shifts direction after covering a yard or two and swings around the sharp charging end. "The



Diag. 3

quarterback," declared Sutherland, "has little to do as the defensive end has taken himself out." If the end drifts, the quarterback and fullback carry out the same assignments as on a wide end sweep against a drifting end.

The success of the end run in Diag. 4 depends upon the ability of the wingback to clear out the end and the speed of the other backs to get around fast enough to throw outside blocks on the secondary. The play works best when the defense is tightening up to stop thrusts through the line. The left end and center check momentarily in the line and then go down to take the right halfback and safety man, respectively. The two guards pull out, swing around their end and cut down the first man they can reach in the open. Against a seven-man line both tackles check, but against a six-man line, the outside tackle goes through for the strong side backer-up. The right end checks the tackle with a long body block to the outside.



Diag. 4

On the snap the wingback takes one step towards the end and throws his body to the outside, staying down on all fours and fighting to maintain this outside position. The quarterback takes three steps out toward the end and then swings around him and down the field. The tailback goes out straight and fast using the fullback to the best advantage. "Against a defensive end who waits (flat-footed end)," advises Sutherland, "use power straight at him. Otherwise the ball-carrier should

(Continued on page 15)



The Cut

Left: Inside Tackle

AN imaginary opponent can well assume that the back in these pictures is starting on a jaunt around end or a cut outside of tackle, so well does he mask his real point of attack. Camouflaging his intention by starting off to the far side of the field, the back takes two steps, swerves sharply and goes inside tackle.

First, the back reaches for the ball which the center has snapped back with a slight lead. At the same time he starts a long cross-over step on the left foot. As he completes this step he tucks the ball under his right arm and steps out on the right foot. The next move requires a delicate shift of balance, for the weight is brought down heavy on the right foot and then suddenly shifted to the other foot as the ball-carrier pivots on the right, changes direction and steps out with the left. Note how the vigorous sweep of the left arm helps swing the body around. Both legs pump for all they are worth as the back digs for the hole.

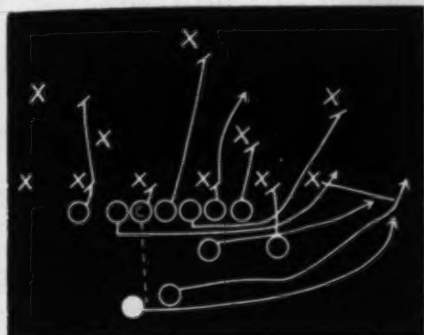
Right: Inside and Out

PERHAPS the inside tackle thrusts have been working for good gains. Let us suppose that the end is driving in sharper to cover up the hole or that the opponents are massing strength at tackle in some other way. The back now crosses them up with this maneuver.

He starts out exactly the same, a cross-step on the left followed by a step then a pivot on the right. Apparently he intends slamming inside tackle again, and an end can almost be forgiven for driving in sharply toward the spot where the back has been picking up yardage. If he does get sucked in, he is lost when the back suddenly stops racing toward tackle after one step, and instead of bringing his right foot forward steps off on it to the outside, pivots on the same foot, changes direction and breaks around end.



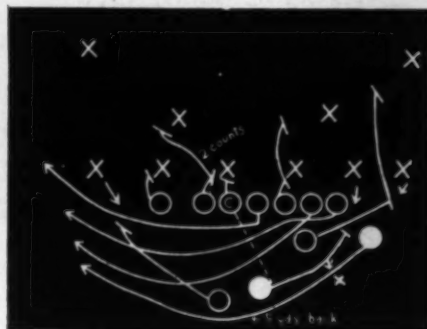
swing down the field as soon as the fullback clears the end. Ends will not drift unless the ball-carrier makes him." The Pittsburgh coach likes to have his guards pull out from one to one and a half yards behind the line of scrimmage in order to give themselves freedom to run.



Diag. 5

Against drifting ends

If the defensive end plays a drifting game, Sutherland changes, rather radically, both line and backfield assignments on an end sweep. In **Diag. 5**, instead of pulling out, the right guard cuts directly for the safety man. The inside tackle pulls out in the guard's stead and breaks around for the defensive left halfback. The right tackle checks the guard momentarily and proceeds down-field for secondary. The strong side backer-up is now taken by the right end. The wingback checks the tackle and the quarterback goes out after the end. While the quarterback keeps forcing the end out, the ball-carrier feigns a sweep around the end. Suddenly the quarterback races down field, the fullback closes in and walls out the end and the ball-carrier cuts sharply inside and down.

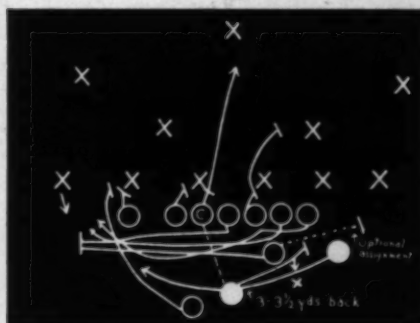


Diag. 6

That the short side deep reverse (**Diag. 6**) is a personal favorite of the coach was evidenced when Sutherland stated that there's "more real football in this play than in any other I know." The wingback on this play starts with the signal. He pivots on his left foot, cross-steps and swings over to take the ball from the fullback. The latter carries the ball as if on a smash over his inside tackle, then turns and with his right hand holds the ball out for the wingback. The ball is not pushed. After getting rid of the ball, the fullback blocks out the intruding defensive left

tackle while the ball-carrier swings deep (about five to five and a half yards) and around his left end.

Linemen block as follows: The left end checks the defensive right tackle and drives him inside. The left guard helps the center work on the defensive guard for two counts and then continues on for a shoulder block on the weak side backer-up. The right guard pulls out and takes the first man in the open. If the defensive strong side guard is sucked over by the fullback, the inside tackle checks him momentarily and continues on for the strong side backer-up. The outside tackle pulls out deeply just inside the position the fullback has just evacuated, and leads the ball-carrier. On this play, the right end also pulls out of the line—taking two parallel steps and then swinging back for interference. In the backfield, the quarterback checks the left end and the tailback takes out the right wing with a reverse body block. By maneuvering his head to the inside and wrapping his body around the outside of the end, the tailback tends to draw the end inside and away from the play. The defensive end can better meet the play by drifting with it. The end is then set up for the guard.



Diag. 7

Close reverse

The deep reverse may run into a snag if the defensive tackle and end are playing wide. In this contingency the Pittsburgh coach changes assignments and runs off the close reverse outlined in **Diag. 7**. After receiving the ball the fullback feints in closer to the

Spinner with Mouse Trap

The Pittsburgh spinner with mouse trap (outlined in **Diag. 8**) as run off at the Northeastern Coaching School. Note how carefully the tailback lines up behind the center. To avoid any give-aways, he faces the line squarely with both the feet on a parallel line and the weight distributed evenly. As he receives the snap from center, he pivots on his right foot toward the oncoming wingback. He fakes a hand pass into the latter's stomach and the wingback covers up and carries out the full threat of the reverse. The ball-handler continues his full spin, picks up the quarterback and outside tackle as they come around to mouse trap the defensive tackle, and prepares to slip inside the hole. In the last picture, note how his right foot points directly toward the hole. There is little opposition from the "unsuspecting victim" of the mouse trap, Marty Gilman, the dummy peddler. Marty took one glance at the two husky blockers and promptly went on a sit-down strike.



Bernie Bierman

By Clyde Carpenter
Billings, Mont., H. S.

INSOFAR as Bernie Bierman is concerned, the "die for dear old Rutgers" adage is strictly passé as a psychology for his football teams. Lecturing on the basic elements of the Minnesota offense and defense at the University of Montana Coaching School, Bierman included his psychological theory as an integral part of team play. He impresses his players with the fact that they owe nothing to the school or the coaches; only to themselves and each other do they have a duty. He does not believe in highly keying a team but would rather have them calm and determined to win. He expects the fun of winning to be their incentive.

Getting back to the practical side of the game, Bierman stated that the main reason Minnesota employs a huddle is to wall out the noise we have today in our large stadiums. In the huddle no teammate is permitted to mention a play or a signal to the quarterback, but merely suggest to him if an opponent can be handled by taking him in or out, or that a certain halfback is coming up too fast on the play. Talking, which leads to squabbling, is absolutely forbidden.

On a formation right, each man starts off with a cross-over step on the left foot. The second step is long or short, depending on the territory left to cover. On the count of three each man is expected to be in his respective position and ready for the center snap.

Bierman employs an unbalanced line with both ends split. The weak side end always plays on the outside of the defensive tackle no matter where the latter is set. The strong side end is limited to two yards. He can be less than two yards out from the tackle but never more. Both ends work on the inside defensive men. Bierman's wings never drive tackles out, always in.

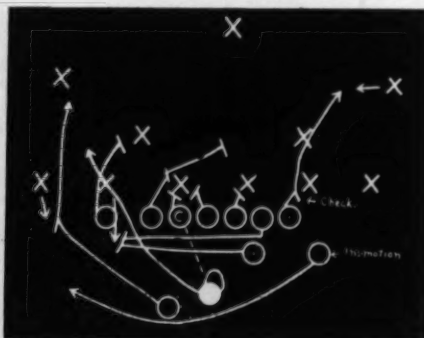
Occasionally Bierman will split his line, leaving a trap hole between the strong side guard and tackle; or permit the weak side end to slip into the strong side.

The quarterback lines up an arm's distance behind the line in the hole between the tackles. This man is usually the signal caller and blocker; does not have to be a ball-carrier or the fastest man on the team. The fullback plays three and a half yards back of the hole between the guard and tackle. He must be of the tough, rugged type—big, fast, a blocker and line plunger. Five yards back, between guard and center, is the tail-

(Continued on page 34)



line so that the wingback is not forced too deep in circling inside the defensive end. The wingback runs about two yards closer to the line after receiving the ball than he does on a sweeping reverse. The quarterback either goes out to check the defensive strong side end or helps his right guard work on the other end. The left end hits the tackle low and sets him up for the tailback. The inside tackle checks the guard and continues through for the strong side backer-up. Pulling back about two and a half yards, the outside tackle swings inside the defensive end and cuts down the defensive right halfback. The right end takes two parallel steps to the left, pulls out a little deeper, also runs inside the defensive end and blocks the weak side backer-up.



Diag. 8

"Run off correctly," said Sutherland, "the coach in position of the defensive end during practice should not be able to see who gets the ball" on the spinner play with mouse trap outlined in **Diag. 8**. The wingback is in motion before the ball is snapped on this play and should carry out the full threat of the reverse after the fullback fakes to him. The latter spins and rams inside the tackle being mouse trapped. The closer this tackle plays, the closer the ball-carrier has to hit toward center. The outside tackle and quarterback mow down the unsuspecting victim of the mouse trap. The left guard and center team up on the defensive guard, if the defensive guard anticipates the play and is playing on the weak side. If the guard is playing on the strong side, then the right guard and center work on him. Either one of the guards can go through for the strong side backer-up, depending on the situation. The left end breaks directly for the weak side backer-up. The strong side end checks for one count and moves down for the defensive left halfback.

The Half Spin

The success or failure of the spin hinges on the ability of the two men to make the pass as deceiving as possible. As the first back receives the ball, he half spins away from the line, using his right foot as a pivot, and cradles the ball in his right arm while covering it with his left hand. The second back brushes by and apparently takes the ball out of his hands. Note how both men offer the line only a side view of their bodies in the fifth and sixth pictures. With the ball cradled deeply in both arms, the first back half spins back into the line, using his left foot as a pivot.

RECENT TRENDS IN SIX-MAN FOOTBALL

By Stephen E. Epler

While affiliated with the Beatrice, Nebr., High School, Stephen E. Epler, one of the most ardent adapters of sports for fewer players, compiled the first set of rules for six-man football which were subsequently published in booklet form. (Also see "Football Arrangement for Six Players" in the Sept., 1935, Scholastic Coach, and "Football for Fewer Players" in the Sept., 1936, Scholastic Coach.) The material for this article—a survey showing the inter-relationship of six-man football to the eleven-man game—was gathered from a study of inter-high school athletics in which the author collaborated with Dr. Jesse Feiring Williams of Teachers College, Columbia University, N. Y. In the data referring to six-man football, Epler includes all adaptations of regular football in which fewer than eleven players are used.

IN discussing the pros and cons of six-man football, football men are most vitally concerned with the effect the popularity of the abbreviated offspring may have on the regulation eleven-man game. They evince keen interest in questions like the following: Does six-man football compete with the eleven-man game? If six-man becomes popular, will it hurt the regular eleven-man game? Will high schools playing eleven-man football change to six-man football? Advocates of the six-man game maintain that as long as over 50 percent of the high schools in the country do not play any kind of football, there is little danger of conflict; or, if six-man football is better adapted to the needs of a school, such a change is justified.

Figures revealed that in the ten states where six-man football was most played in 1935 and '36, there was a corresponding increase in the number of high schools playing the eleven-man game.¹ In relation to the statistics covering the entire country, this increase occurred at the same time a slight decrease was reported in the number of high schools playing regulation football.

No survey was made in 1934, but not more than 50 or 60 schools probably played the game at the time. In 1935, there were 156 schools reported as having six-man teams. The next year, 532 schools in more than 20 states were playing the game. There were 7,748 high schools playing eleven-man football out of a total of

18,328 high schools included in the survey. Thus, 42 percent of the high schools played regulation football and three percent, six-man. For every five high schools, only two played football, and for every 15 playing eleven-man, there was one playing six-man football in 1936.

The three out of five (over 10,000) high schools who do not put football teams on the field represent the potential field for six-man football. There are no grounds to presume that those schools adequately served by eleven-man teams will change to the other.

Study by states

The states in which football is played by a larger percent of high schools also seem to be the states where the six-man game flourishes. However, there is no indication that six-man grows at the expense of the eleven-man game. Both seem to thrive in the same area.

The ten states leading in the number playing six-man football have over half (50.9 percent) of their high schools playing eleven-man football.² This is nearly ten percent higher than the average (41.7 percent) for all 45 states. However, these ten states are included in the 45 and help raise the total averages. When the ten are compared to the other 35 states, the difference is even more marked. Less than two-fifths (37.9 percent) of the high schools in these 35 states play eleven-man football. This is 13 percent lower than for the ten states in the upper bracket.

What has happened over the two-year period? In the 35 states, there was a decrease of 0.8 percent in the schools playing eleven-man football.³ In the ten states leading in six-man football, the percent playing eleven-man football increased only slightly, from 50.8 to 50.9 percent.

When the six- and eleven-man schools are taken together, the ten states show up even better. In 1935, 53.3 percent of the schools played some kind of football and in 1936, 59.7 percent played either six- or eleven-man football. The figures for the 35 states are 39.0 percent in 1935 and 38.8 percent in 1936. Thus, football increased more

Abbreviated game does not flourish at expense of regulation football, both thrive in same areas

than six percent in the ten states while declining slightly in the other 35. The ten states had over 20 percent more of their high schools playing football than did the other 35 states. The ten leading states have, thus, a ratio of three football schools for every two in the 35 states.

Though it may appear on the surface that the ten states are loyal supporters of both types of football, they should be studied individually because a large gain in one state may often cover up several decreases in other states.

Eleven-man gains

When only eleven-man football is considered, five of the ten states had a larger number playing in 1936 than in 1935, two had the same and the remaining three had less. The largest increase was in Washington, where 59 more schools were reported playing eleven-man football. Washington had no six-man teams in 1935 but reported 25 in 1936. Iowa was credited with the largest decrease. This was a decrease of 30 schools playing regulation football, but, significantly, Iowa also reported 25 six-man schools in 1935 and only 20 in 1936. Thus, both games suffered in Iowa and the loss in popularity of one game did not add to the advantage of the other. Iowa was the only one of the ten states to report a loss in schools playing six-man football. The other two states showing a loss in eleven-man football were Illinois, a loss of 20, and New York, a loss of 15.

In North Dakota, the number of schools playing eleven-man remained the same, 80, but the number of six-man teams increased from 35 to 75. In three years the number of six-man schools in North Dakota has increased until there are almost as many schools playing six-man football as there are playing the regulation game. At the same time, there was no decrease in the number playing eleven-man football.

Nebraska, the birthplace of six-man football, gained three schools for eleven-man and five for six-man football. The former game climbed from 218 to 221, and the latter from 25 to 30.

Summary

The states in which six-man football was most widely played in 1936 had about 20 percent more high schools playing some form of football than the other states. The ten states leading in six-man football had a slight increase in the percent playing eleven-man football, while the other states experienced a small decrease. In the leading six-man states, nearly one school in ten (nine percent) played six-man football in 1936. North Dakota had no decrease in the number of schools playing eleven-man football,

¹The data covered 45 states the first year, 1935-6, and 47 states in 1936-7. The comparison is made on the basis of 45 states. No data were obtained from Massachusetts, Arkansas and California furnished data for 1936-7 only. In most states the secretaries of the high school athletic associations supplied the information; in several states it came from the department of education.

²The ten states are: Illinois, Iowa, Montana, Nebraska, New York, North Dakota, Oregon, Washington, Wisconsin, and Pennsylvania. Arkansas reported 30 high schools playing six-man football in 1936-7, but the state is not included in the above ten because the figures for 1935-6 were not obtained.

³The total high schools in the 35 states included in the 1935-36 survey were 12,609; for 1936-7, 12,435. The number of high schools in the 35 states playing eleven-man football in 1935-6 was 4,881 or 38.7 percent; for 1936-7, 4,711 or 37.9 percent. In these states, 31 schools played six-man football in 1935-6 and 107 in 1936-7.

BASKETBALL PRE-SEASON PRACTICE SCHEDULE

By Blair Gullion

First six weeks primarily a period for conditioning, teaching fundamentals and actual game preparation

The success of Blair Gullion's "100 Drills for Teaching Basketball Fundamentals," has exposed the University of Tennessee basketball coach to many queries from high school coaches regarding the conduct and organization of early season drills. Gullion's article is a summary of his replies to various coaches. The author's latest book, "Basketball Offensive Fundamentals Analyzed," was published last winter.

MANY coaches are undetermined just as to how and what to teach in the early practice season. This is especially true where the basketball coach has no football duties and has the opportunity to start basketball practice from six to eight weeks prior to the first game. The problems of the football-basketball coach are somewhat different; and the material that follows is more applicable to the man with no football duties.

The pre-game practice season is primarily a period for conditioning, teaching fundamentals and laying the basis for the season's competition. The adage that "a team is no stronger than its fundamentals" is a fact accepted by the coaching profession.

Protecting the feet

Since the feet of the player are the physical foundation of his play, it is well to afford them every possible protection while they are rounding into shape. The following suggestions are offered for care of the feet:

1. Equip the players (at least the key or better players) with new basketball shoes that have been carefully fitted.
2. Use a first grade, heavy wool sweatsock that will offer a satisfactory cushion for the foot.
3. Provide each player with thin, cotton inner socks to be worn under the heavy ones. This is effective in the prevention of blisters.
4. Provide a good skin hardener, and see that it is used daily before practice.
5. If possible, give the players clean sweatsocks before each practice session.

It is advisable for the coach to have an outline or program for the work during this period. The program should naturally be of an elastic type so that it can be adjusted to the needs of the individual or squad. The writer has used the following type for a number of years and finds that the

teaching sequence has brought good results.

First week

Start the first week with shooting (field, free throw, underbasket), passing, and ball-handling, with special emphasis on knowledge and proper execution. Devote the first afternoon of the passing work to three passes of simple execution, and add one, or at the maximum, two, additional ones each succeeding afternoon.

"Dope sheets" outlining proper execution of fundamentals will undoubtedly prove of value to the players, as well as practical demonstrations of proper form in fundamental execution (given by the coach or players who are skilled). Moving pictures of basketball fundamentals and "still" shots may be studied. Action pictures in sequence are splendid teaching material. Players may be quizzed on their knowledge of fundamentals, and slow motion drills can be used to insure the mastering of technique.

Second week

Practices are speeded up during the second week and the competitive element is introduced with shooting games such as basketball golf, "21," etc. Passing can be increased in tempo and hardness through the use of more intricate drills.

Practice on dribbling technique should be introduced about the middle of the week. Relay dribbling races and wind sprints at the end of the practice periods are excellent conditioners. The three and four men pass-and-go-behind-the-receiver drills are also good combination condition-fundamental drills. Discussion of set offensive plays with players walking through the formations and the elements of the fast break type of offense, may be discussed during the latter part of the week.

Third week

Stops, turns and pivots should be started on the first day of the third week. This work may be delayed to allow certain players' feet to harden. Practice on this fundamental should be limited to 15 to 20 minutes each afternoon. Considerable slow motion work on these techniques is advisable

since faulty execution may result in serious ankle and knee injuries.

Shooting, passing, ball-handling, and dribbling are continued and the length of the drills are increased from one to one and a half hours. The set offense and the fast break defense should be practiced against passive defensive men.

Fourth week

Defensive tactics are added during this week and instruction sheets on individual and team defense should be given to the players. Stance, footwork, position, rebound play, playing dribbler, playing man without ball, etc. are thoroughly discussed. One on one, two on two, and three on three defensive drills are used.

All previous fundamentals are reviewed and worked on daily. Considerable emphasis should be placed on footwork, since work on this fundamental was delayed in getting underway and the amount of time practical to spend on this fundamental each afternoon is limited. Excuse players with sore feet from footwork drills but have them work on free throwing and ball-handling.

Team offensive work should consist of regular dummy and half-court scrimmages on set plays with an occasional huddle in which the coach can criticize play selection and execution. The fast break should be practiced for ten minutes against a defense set up by the coach.

Fifth week

The coach should start the week with a pep talk emphasizing team spirit, condition, training, etc. All offensive and defensive fundamentals should be reviewed and the team defense or defenses set up.

Work on team play early in the week should consist of the use of a set offense against a weak defense, with the defense strengthened at the end of the week to determine the amount of progress being made up to date.

A 20-minute regular game scrimmage can be held on the last day of the week. The coach should use the blackboard at least twice a week to outline the team offensive and defensive play. At this point it is well to outline and discuss the various types

(Concluded on page 40)



PLAY SAFE WITH THE BEST

Wear a supporter made under sanitary conditions

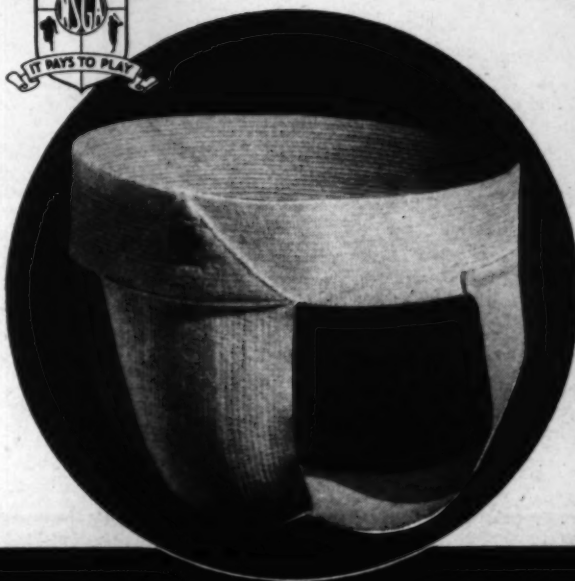


2 out of 3 athletes wear Bike

ALL over the country coaches and trainers realize the importance of keeping athletes in top condition at all times. And these same coaches and trainers carefully supervise training table diets—see that nothing but the most wholesome food is served—make sure their men have plenty of rest, and most important of all, they insist on the finest athletic equipment. That's why they thoroughly investigate the kind of supporters to be used by the athletes in their charge—make sure that they are properly made—under the most sanitary conditions.

Do you know how the supporters you buy are made? Are you sure they are constructed of good materials—the kind of materials that will stand up—won't fray or lose their elasticity? And are you sure that the supporters you buy are made under really sanitary conditions? Can you afford to take chances with unsanitary supporters carelessly made—perhaps in actually unclean surroundings?

Bike athletic supporters are made from the very finest materials under the most modern scientific and sanitary conditions, equalled only in the manufacture of delicate surgical dressings. Each supporter is made with the greatest care and painstaking workmanship to meet urgent requirements on every point. When you buy a Bike supporter you know that you have a supporter that you can depend on.



Don't gamble on this most important item of athletic equipment. Play safe with a supporter you know about! A supporter that gives the maximum safety, comfort, and economy. A supporter that is worn by 2 out of 3 athletes.* That supporter is Bike! Ask for Bike when you buy!

*Impartial survey by A. C. Nielsen Co., revealed 2 out of 3 athletes wear Bike.



BOTH COACH AND TRAINER ARE ON THE SPOT

when the College team is training for the big football games:

The quarterback has a pulled tendon;

The right guard is nursing a boil;

Another player has a painful strain and flesh wound.

Fortunately there is
always

Antiphlogistine!

Its use will serve to put these men back in the game.

— • —

*Sample to coaches, trainers
and physical directors*

**The Denver Chemical
Manufacturing Company**

167 Varick Street,
New York, N. Y.

Nat'l Federation News

ONE of the outstanding developments in connection with athletic equipment is the recent perfection of the molded basketball. This ball has been developed through the efforts of the Federation and is the result of nine years of experimentation—ever since the Federation became interested in the difficulties schools were having in obtaining an adequate supply of durable, well-shaped balls at prices suited to their budgets.

The new ball is far superior to the old sewed ball in reaction and durability. All of these newly manufactured balls are built around a mold and combine many of the durable qualities of a cord tire with the best traditions of leather craftsmanship. Testing machines have proven the durability of the molded ball over the sewed type. Such machines hurl the ball with great force against a backboard from any conceivable angle, giving the ball the equivalent of at least a month's ordinary use in less than an hour. It has been found that the sewed type ball will retain its shape and wearing quality for about two hours of pounding by the machine. During that time the leather fibers become so worn that the ball swells up and loses its shape. On the other hand, the molded ball has withstood at least eight hours of pounding by the machine without losing its spherical shape.

Minor difficulties are anticipated during the period when both sewed and molded balls will be in use. The molded ball has a slightly more lively reaction and it will require a little time for players to adjust themselves to the constant reaction. However, this difficulty will probably vanish when the manufacturers sell out their present stock of sewed balls.

Methods of production

The balls are made in one of two ways. In one method, the core is built over a perfect spherical mold and consists of sectors of airplane silk vulcanized together by a latex cement. After this process is completed, the core is covered with the finest grade of pebble-grained leather. The wax mold is then melted or broken down and is removed through a small hole left in the lining at one pole. Such balls are entirely smooth both inside and outside with no sewed seam or lace. Their reaction is exactly the same regardless of which part of the surface strikes the floor or the backboard. They react best with about eight pounds of air pressure.

The other type of ball is manufactured from canvas and airplane silk lining molded in hemispheres. The two hemispheres are vulcanized together around a bladder which is blown up inside a hollow sphere. Since the lining has been formed around a perfect sphere the bladder takes that shape. The spherical lining and bladder are placed in a winding machine and the finest grade linen cord, impregnated with latex, is wound around the core in a manner similar to the one employed in making baseballs. The core is then placed in a hollow steel sphere and latex is forced around it. As the latex lends itself to the spherical mold, every ball, therefore is perfect in shape. The mold contains grooves corresponding to the seams on the older type ball, with the result that ribs appear on the core. These ribs serve as a guide for the placing of the leather, provide a slight gripping surface for the fingers and lends the ball somewhat the traditional appearance of the seamed basketball. The leather cover strips are fitted to the spaces between the ribs and vulcanized to the core. The finished product is in one piece with a surface unbroken by seams or lacing. Ten pounds of pressure supply the best reaction.

One of the new molded basketballs will bear the National Federation approved stamp. Barring unforeseen difficulties, it is probable that the molded ball will entirely replace the older type ball as soon as the players become accustomed to the more perfect reaction.

Safety standards

The committee on safety equipment has continued its work on safety standards for football equipment, and the National Federation approval tag and cloth label is now being used on certain helmets, shoulder pads and pants. Through the cooperation of the equipment committee and a committee representing the manufacturers, a number of improved features have been added to these articles of apparel. School men who purchase them have some assurance that the maximum safety and durability qualities are present in the material. The various state high school athletic associations are urging member schools to purchase no new football equipment except that which bears the safety label and tag.

H. L. Ray, technical advisor to the interscholastic football rules committee, will spend two weeks in Florida in connection with football rules interpretation meetings at Tampa, Miami, Jacksonville, Pensacola, and several other cities.

The use of the Federation rule and interpretation books has grown phenomenally. From a first edition of 2,000 the circulation has mounted to a high of 70,000 today.

BLACK LEATHER ALL STAR

Even better this season. The new high-cut pattern supplies better and finer support. Now three quarter lined to prevent stretching and to assure perfect fit season after season.



BLACK CANVAS ALL STAR

The famous shoe that has been preferred for over 20 years still leads the parade on America's basketball courts because it possesses the plus values that star players demand.



WHITE OLYMPIC ALL STAR

The handsome shoe that helped America to its Olympic victory has been further improved by the addition of the noted black molded outsole familiar for years to All Star wearers, plus a specially compounded blue foxing and toe strip of exceptional wear.



BLACK LEATHER LUCKY BOY

A newly-designed molded sole, leather upper basketball shoe that retails at a moderate price — and yet offers the many advantages every player demands in his basketball footwear. Also available in canvas.



Insist on "Chuck Taylor" models, the name that identifies America's most popular footwear for basketball and general use.

IT'S the leader's job to lead — and again, for the 1937-1938 basketball season, Converse announces improved models of the famous-for-a-quarter-century "Chuck" Taylor basketball footwear. For every player who insists upon shoes that provide 40% greater traction, finer comfort, better

fit and maximum wear, there is a selection from three ALL STARS — Black Canvas, White Olympic and Black Leather. The new Black Leather Lucky Boy offers a splendid leather top, molded sole shoe at a moderate price. Just say "Converse" to your distributor when you want more for your money.

Every Coach Every Player

should have a copy of

MILLS on KICKING



KICKING the American FOOTBALL

By LEROY N. MILLS

When Mills' book first appeared five years ago, only a few college and high school coaches knew of his scientific system of kicking the American football. Now, however, Mills' ideas are being taught all over America and this book has become the bible of thousands of football men.

KICKING TO WIN

The man who invented and named the coffin corner kick, who discovered and perfected a method of scientific controlled kicking, who knows more about kicking than any one else in the world, and who turned kicking from a purely defensive measure into a slashing, vital offensive, is possibly the most widely sought after football coach in America. Each season a score or more leading colleges and schools endeavor to have him instruct not only their kickers but their teams as a unit. Dozens of foremost coaches now employ his system and constantly seek his advice. But Mills remains an amateur; he gives his teaching service gratis. And in order that the thousands of coaches and players of America may have the benefit of his system, he has written this book in which he outlines in detail every step in learning to kick and every factor in the employment of kicking to win football games. The newly revised edition shows the possibilities of every kicking play in the light of the current rules. The book is elaborately illustrated with graphic pictures and diagrams.

SPECIAL SQUAD OFFER

The price of single copies of Mills on Kicking the American Football is \$2.00. Special prices may be had by teams desiring several copies so that all members may have an opportunity to study the Mills system. Write the publishers for quantity quotations. We urge you to

ACT AT ONCE! MAIL COUPON BELOW

G. P. PUTNAM'S SONS
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Please send..... copies of KICKING the AMERICAN FOOTBALL. Price \$2.00 each.

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DIFFERENCES IN NATIONAL FEDERATION AND N.C.A.A. RULES

FIELD MARKING

NAT. FED. The side zones are 15 yards wide, and a five yard protective area is provided around the entire field where space will permit.

N.C.A.A. Side zone is 10 yards wide and no protective zone is specified.

EQUIPMENT

NAT. FED. Penalty is provided for playing without head protector. Length of shoe cleats is limited.

N.C.A.A. Wearing of head protector is optional. No stipulation as to length of cleats.

SUBSTITUTIONS

NAT. FED. Substitute may communicate with teammates after reporting. A substitute may start the fourth quarter or enter during that quarter, be taken out and sent back in. This is to prevent keeping an injured player in the game.

N.C.A.A. Substitute may not communicate unless it is through calling signals. The extra fourth period entry is not allowed.

RULES OF ENFORCEMENT

NAT. FED. Penalty for a foul in the scrimmage zone cannot result in the ball being carried more than half the distance to the goal line. Distance penalty for a disqualifying foul is 15 yards. Enforcement is same as for any unnecessary roughness foul.

N.C.A.A. This applies only when the ball is inside the one-yard line.

Penalty for disqualifying foul is loss of half the distance, and exceptions to general rules are made if such a foul is one of a double nature or happens during a free ball or on a play in which there is a major incompleteness.

FORWARD PASSES

NAT. FED. Forward passer may be at any point behind line of scrimmage. Penalty for a forward pass from beyond the line of scrimmage is five yards and loss of down from the spot of the pass. This applies even though the pass is incomplete in the end zone. Thus, a team receives credit for distance legally gained prior to the pass. Penalty for a pass not from scrimmage is the same as for a pass from beyond the line.

N.C.A.A. Passer must be 5 yards behind line of scrimmage.

Penalty for such a pass is loss of down from previous spot, and in some cases results in a touchback.

Penalty in such a situation is 15 yards from spot of the pass.

KICKS

NAT. FED. A kicked ball remains a kicked ball only until it has been in possession. A scrimmage also ends with possession.

N.C.A.A. A kicked ball remains a kicked ball until the end of the down even though possession might change several times. Consequently if a foul happens any time during the down it is a foul during a kicked ball. A scrimmage ends with the down.

A punt is not allowed on any free kick.

A punt is not allowed on kick-off, but it may be used after a safety or fair catch.

If a foul occurs on attempted field goal during a try, penalty is enforced from previous spot.

In similar situation penalty is enforced from spot of foul.

Penalty for any foul committed by the receivers simultaneously with, or subsequent to, the illegal touching of the kicked ball by the kickers may be declined.

A provision for a similar situation applies only to those fouls which are classified as personal fouls and would not apply to such fouls as holding.

Accidental kicking of the ball is treated the same as if the ball had been merely touched.

The question of intent is removed. Accidental kicking of the ball is considered the same as intentional kicking.

OUT OF BOUNDS

NAT. FED. Whenever a foul occurs after the ball is out of bounds between the goal lines, it is considered a foul between downs since the ball was dead before the foul happened. Consequently penalty for all such fouls is enforced from the succeeding spot which is usually the in-bounds spot.

N.C.A.A. When foul occurs after ball is out of bounds between the goal lines the spot of enforcement varies depending on whether it is in the field or outside and whether it is against the runner or against some player other than the runner.

Strict enforcement of penalty for tackling a runner who is out of bounds is made mandatory and responsibility is placed on the tackler.

Rule relative to tackling out of bounds is such that it is seldom enforced.

If ball is touched simultaneously by two opposing players and goes out of bounds, it is awarded to opponents of team last in possession.

In a similar situation ball is awarded to team which did not put ball in play even though possession may have changed several times.

RIGHT TO RETURN

NAT. FED. A lineman who has been legally shifted to the back field may return to the line in a subsequent quarter.

N.C.A.A. A shifted lineman may not return to the line.

Here's a NEW poster that will help **YOU** and your school

● Why the Poster is Important

We have just published a poster featuring a message by Alonzo Stagg—a message of such vital importance to all athletes that no high school coach should fail to display one where it can be seen by all his students.

This poster, the second of a series, urges all students to follow the all-important "Rule No. 1 for Athletes"—abstinence from alcoholic beverages.

Its message, written by a man who has coached football teams for many years, is bound to be an inspiration to every student who reads it. It will help guide the students of your school toward sound health and perfect fitness. And it will help you drive home the most important training rule any coach ever gave a team.

● How to Use the Poster

This poster, strikingly printed in two colors, appears on the next two pages. We have placed it here so that you can be certain to have a copy. Remember, as an athletic director and coach, you have a greater opportunity to influence the development of the students in your school than most other members of the faculty. This poster offers you a chance to make that influence more effective than ever before.

The poster can be easily removed without in any way damaging your copy of Scholastic Coach. With a knife, or letter opener, just fold back the two staples in the center of the spread and lift out the poster. Then mount it on your bulletin board, where its message can be read not only by the members of athletic squads but also by all other students in your school.

If you wish additional posters, we will gladly send you any number up to five from the limited supply we now have. If for some special reason you desire a larger quantity we will endeavor to fill your order. Write direct to this office or use the Mastercoupon on the last page of this magazine.

What Coaches Said About Poster No. 1 Featuring Andy Kerr

Coaches from all over the country were enthusiastic about the first poster of this series, featuring a message from Coach Andy Kerr of Colgate on "Rule No 1 for all Athletes."

A coach in Georgia said, "I have found this an excellent way to reach young men in our school, and especially athletes. As athletic director and trainer of character of young men, I am for this 100%."

From New York, "The posters are an excellent idea. Have had many favorable comments from parents as well as children. The use of some well-liked personality like the one this year has also an advantage."

From South Dakota, "We have had much favorable comment on this type of poster. I am confident it brings valuable results."

From Michigan, "I am very much in favor of this method of approaching the alcohol problem."

ALCOHOL EDUCATION, 1730 Chicago Ave., EVANSTON, ILL.

FOR PERFECT CONDITION

FOLLOW

RULE NO. 1

FOR ALL ATHLETES





"After forty-seven years of coaching football, I can say without hesitation that a football player, as well as any boy or girl, would be a fool to drink alcoholic liquor. Why put poison into your system? Give your body a fair break. Also give yourself and your future a fair break. Don't play around with dynamite.

"I honestly believe that the main reason why, at seventy-five years of age, I am able to coach football and to play tennis and run half a mile when I choose is that I have not impaired my bodily mechanism by drinking alcoholic beverages."

Amos Alonzo Stagg

ALCOHOL EDUCATION

1730 Chicago Avenue

Evanston, Illinois

A BLACKBOARD DRILL IN ALCOHOL EDUCATION

ALCOHOL AND ENDURANCE

COACH STAGG'S training rule for perfect condition applies to all individuals whether they are athletes in training or not. Yet many of us overlook the fact that endurance is just as necessary in every day life as it is for the athlete.

The average individual does not need to be in the same perfect condition as an active athlete because he does not expend as much energy. But his endurance and general body condition are important to his health no matter what his pursuit may be. For the athlete, endurance is almost as important a requisite as skill. A football player is of little value to his coach if he can be depended upon to play only one quarter. A so called "miler" won't stay on the squad very long if he can last only half the distance.

Destroys body cells and tissues

Alcohol is deadly on the "wind." As alcohol is a solvent and a dehydrant, it absorbs water. In action on living tissues inside the body, it interferes with the normal functions of the organs because it dissolves fatty substances and absorbs water from moist tissues. Two-thirds of the body weight is water, therefore it is easy to understand how alcohol can find an abundance of

moisture to absorb in any part of the body structure. Note the proportion of water in some of the following parts of the body: teeth, 2%; bones, 22%; skin, 72%; muscles, 75%; lungs, 79%; blood, 79%; brain, 80%; cell-protoplasm, 80%; saliva, 99.5%.

Effects of alcohol

The following table shows the effects of alcohol as compared with water.

EFFECTS		
1. On the senses	Alcohol	Water
appearance	like water	no color
smell	peculiar odor	no odor
taste	biting	no taste
feeling (on hand)	evaporates quickly leaves skin dry	evaporates slowly leaves skin moist
2. On fats, resins, gums		
fats, oils	dissolves	no effect
varnish (resin)	dissolves	no effect
camphor	dissolves	no effect
green leaf—coloring	color dissolves	no effect
3. On substances containing water		
meat	hardens slowly	keeps soft
bread	hardens slowly	softens quickly
sugar	no effect	dissolves
white of egg	hardens rapidly	mixes quickly
4. On life	3% Alcohol	
grass seed	sprouts stunted	sprouts grow
two geraniums	gradually dies	continues to grow
two goldfish	dies	lives
5. From temperature		
cold	anti-freeze	freezes
heat	boils at 172 Fr.	boils at 212 Fr.
6. With elements		
fire	feeds	quenches
water	absorbs (takes up)	

This is the first of a series of posters and scientific data on alcohol. Another will appear in Scholastic Coach in December and will give complete data on the action of alcohol on the nervous system.

for **TOP**
PERFORMANCE
AT
LOWEST COST
..... specify
VOIT

You get 3 quality Voit Basketballs or Soccer Balls for the price of only *one* cheap, barely passable leather ball. Yet Voit Balls provide Top Performance *and the rubber used will actually out-wear any leather made!*

Voit Balls are made on a last from six sections of tough rubber vulcanized into one piece for strength, uniformity, perfect shape and balance. No thin spots or distortion. Rich dark-tan color is mixed right into the raw rubber during process of manufacture. Result: A quality ball that looks good, feels good, IS good!



VOIT R B 2 BASKETBALL

School Price \$2.10

Official Size, Weight, Shape, Balance

Here is a basketball that is being heartily acclaimed by schools from coast to coast for its quality performance and thrifty economy. Last built of 5-ply laminated rubber, it is vulcanized into a single strong unit and scientifically treated to insure normal bounce. This ball is so tough it will not scuff or peel, whether used on smooth court or rough playground. Because it is perfectly round and correctly balanced it handles confidently; because it is absolutely uniform there are no bulges or dead spots, therefore no wobbly passes or freak bounces. Seams, stitching, pebble-grained surface texture, laceless design—even the rich dark tan color—are faithfully reproduced. There are no stitches to break—no troublesome bladder to replace. Waterproof.

WRITE FOR NEW CATALOG
... JUST OFF THE PRESS!

There are also Voit Rubber Footballs, Volley Balls, Water Polo Balls, Inflated Playground Balls, Tether Balls, Sport Balls, Softballs, and Bladders for Many Balls.

VOIT R S 3 SOCCER BALL

School Price \$1.90

Official Size, Weight, Shape, Balance

A soccer ball that will come back smiling after the toughest punishment a group of willing youngsters can dish out. Built on a last of multiple sections of rugged rubber, it is vulcanized into one piece, and scientifically blended with chemical ingredients to assure correct rebound. Seams, stitching, dark tan grained surface texture faithfully reproduced. A uniform, perfectly round, balanced soccer ball that will stay that way—for keeps! It will not scuff or peel, even on sharp-surface playgrounds—has no stitches to break, no seams to rip open, no bladder to replace. Weather-water-proof—will not become soggy or "logy", or take on weight. Light, fool-proof metal valve.

VOIT
RUBBER
SPORTS EQUIPMENT

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ABSORBINE Jr.

From the States

This department includes correspondence from state high school coaches associations and state high school athletic associations. All associations are invited to participate.

Illinois

New gymnasium plants

MANY of the new high school gymnasiums now under construction will have good sized basketball playing courts conforming closely to the ideal standard of 84 ft. by 50 ft. Seating capacity will vary in accordance with the size of the town.

Proviso High School in Maywood, where Selmar Storby is athletic director, will soon complete a physical training unit which will include a swimming pool, a maximum sized basketball court with a seating capacity of 3,000 and accommodations on the first floor for track. The building is built along gymnasium-field house lines with the gymnasium on the top floors and the field house and cinder track on the ground floor.

The Rock Island gymnasium is one unit of a complete new million dollar school plant. The plant is erected on a hill overlooking one of the finest scenic stretches of the Mississippi River. The site provides for a fine athletic field with permanent bleachers, and a stadium which will be completed some time in the future. The gymnasium is of the ideal size with a seating capacity of about 3,000. E. H. Hanson is principal and J. R. Clark athletic director.

Centralia is erecting a new gymnasium which will contain an 84 ft. by 50 ft. basketball court and a seating capacity of 4,000. Plans for the building have been designed by O. M. Corbell, principal, and A. L. Trout, athletic director. Centralia is located in the middle of a new oil field and industry is thriving.

Springfield High anticipates playing their conference basketball games in the huge field house under construction which will have a seating capacity of 10,000. Dwight McCoy is principal and Mark Peterman the athletic director and basketball coach.

Seaton in new post

Don Seaton, former track coach of the University of Illinois, has been appointed supervisor of physical education, a branch of the state department of education. Seaton's work will deal with the promotion and supervision of physical education in the schools of the state. The position was created a number of years ago and was filled by Louis Kulcinski. During the past several years the position was discontinued largely because of a lack of funds, but was re-created at the last session of the legislature. Illinois has a law which requires a certain amount of physical education for each child in school.

However, since no additional funds were provided for physical education instruction, very few of the grade schools have observed the law. Seaton will attempt to obtain observance to this law.

H. V. PORTER,
Illinois H. S. Athletic Assn.,
Chicago, Ill.

Texas

North beats South

THE North turned back the South 6 to 0 in the third annual "dream game" between all-star high school players from the two sections of the state. This game is played each summer in conjunction with the Texas High School Football Coaches Assn.'s Coaching School, held this year at Waco. A committee headed by Eck Curtis, Breckenridge, selected the players for the northern team from the first eight Class A districts and their corresponding Class B and C districts; while "Bobo" Nelson of Athens and another committee acted in a similar capacity for the south.

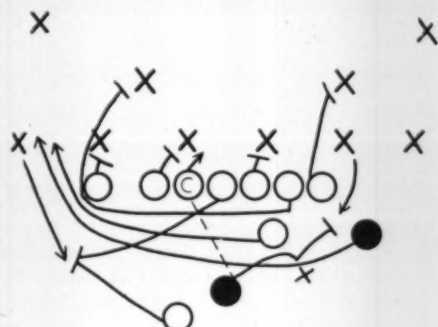
The North, coached by R. B. "Bear" Wolf of North Carolina, and the South, with Dana X. Bible as mentor, worked out twice a day. Each coach conducted one of his daily sessions for the benefit of the 282 enrolled coaches, showing them exactly how he teaches fundamentals of offense and defense. The other drill was held unofficially, but visitors were not barred from any of the practice sessions.

The Association assumes all financial responsibilities for the game, which includes awards for the players. The Association is now considering the advisability of permitting several newspapers from each section of the state to conduct a poll to select the players for next year's game.

Contrary to advance notices, the 1937 game was not of a defensive nature. Both teams held on to the ball longer in most cases than was best for their own good; in fact a quarterback's error in judgment on this score ultimately cost his side the ball game. From a single wingback, the North's all-state backfield and hard charging line overpowered the lighter South-erners who lined up in either a short punt or double wingback formation.

It might be of some consolation to high school coaches to know that even Dana X. Bible cannot make high school quarterbacks realize what a valuable weapon the punt is. With a nice breeze to their backs, the South received the opening kickoff, fumbled it badly and wound up on their own 10-yard line, close to the side-lines. Instead of punting out of danger, the Rebel quarterback elected to try a reverse toward the side-line. Although he barely reached the line of scrimmage, he called for another reverse, this time

wide to the far side of the field. He fumbled and the North recovered on the 12-yard line. On the first play, Harry Hayes, San Angelo all-state halfback and quarter mile champion playing the wingback position, drove all the way down to the one-yard line on the reverse in **Diag. 1**. On his second

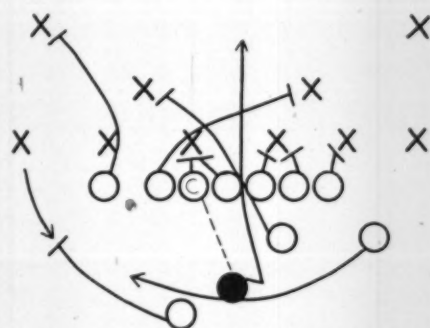


Diag. 1

try, Marion Pugh, North Side (Fort Worth) all-state fullback, bucked it over the goal line with a slant off-tackle.

Reverse play gains

The reverse to the wingback was by far the North's best ground gainer. The writer's chart showed that of the nine times the play was called, it gained a total of 47 yards with the following distribution: 12, 14, 2, 4, 8, 2, 5. Once it was stopped at the line of scrimmage and another time the wingback fumbled and lost three yards. During another goal line drive, the North picked up 14 yards on the fake reverse and spin outlined in **Diag. 2**. This threat



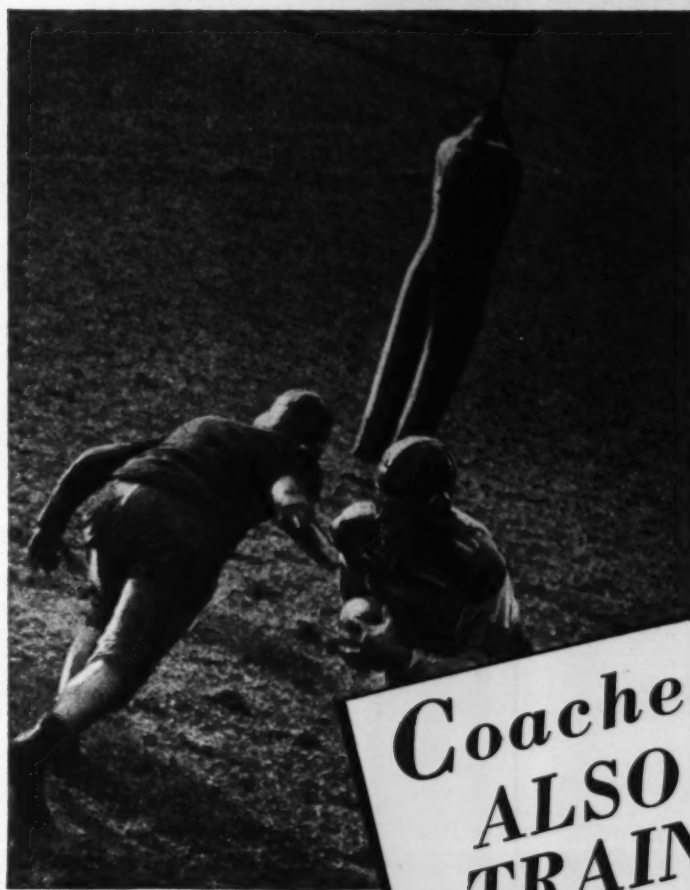
Diag. 2

died on the one-yard line after three off-tackle smashes and a reverse.

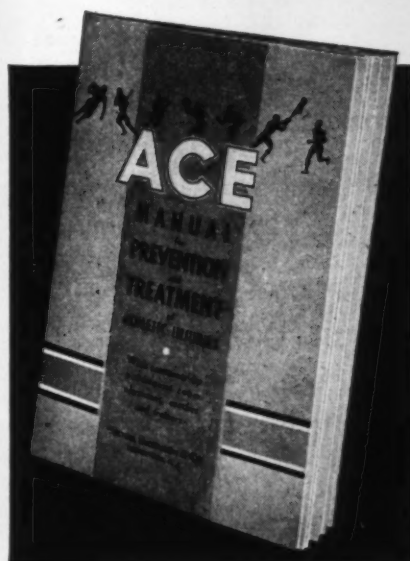
In one of his lectures, Bible declared "You should spend more time on your goal line offense. I don't know how much time you set aside for it, but you should spend more." Of course he was greatly handicapped in preparing for the game by the lack of time, but when the South marched close to the goal line, Bible sent a quarterback in on nearly every play (a free substitution rule prevailed). All the coaches were keenly interested in this goal line strategy.

With first down on the North nine-yard line, the South ran a play inside of tackle which gained only one yard. On the next play they attempted to

(Concluded on next page)



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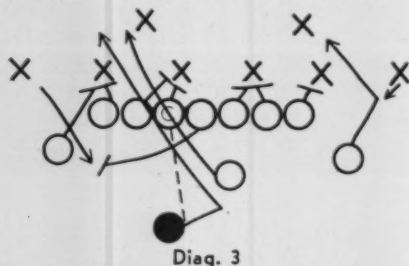
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run outside the other tackle, but again only advanced one yard. A close reverse lost a yard, and the threat ended with an incompleting forward pass in the flat. One of the South's best ground gainers is outlined in **Diag. 3**. By mu-



Diag. 3

tual agreement both teams employed a 6-2-2-1 defense.

The North now boasts two victories to the South's one. In 1935 "Tad" Wieman's Southerners won from the North, coached by Ted Cox, 3 to 0; last year the count was evened up when the Francis Schmidt and "Bear" Wolf North team turned back Bernie Moore's eleven, 13 to 0.

STANDARD LAMBERT,
Texas H. S. Football Coaches Assn.,
Austin, Tex.

According to the high school coaches present at the Association's coaching school, the 1937 scramble for the football championship of the state bids fair to be one of the most hotly contested races in the history of the Lone Star

state. The schools have been divided into three classes: Class A, composed of schools with more than 500 students; Class B, those schools with more than 150 but less than 500 students; and Class C, consisting of schools with less than 150 students. Each class is subdivided into districts. Class A teams fight it out for the state championship; Class B determines a regional champion from among eight district leaders; and Class C concludes its race after merely determining a district champion.

Outstanding Class A teams that are already being installed as favorites include: Amarillo, champions of 1935 and '36, North Dallas, North Side and Paschal of Fort Worth, Dennison, Sherman, Gainesville, Tyler, Marshall, Longview, Olney, Vernon, Wichita Falls, Breckenridge, Abilene, San Angelo, El Paso, Corpus Christi, Port Arthur, Lubbock, Waco, and Harlingen.

Bible, Wolf and Drew

Three well-known coaches conducted the football course at the fifth annual coaching school. Dana X. Bible, of the University of Texas and former coach at Nebraska, lectured on the fundamentals of the passing, kicking and running game, giving both the offensive and defensive phases of each department. He devoted a special lecture to quarterback strategy and psychology. For field work, he demonstrated a series of offensive and defensive

maneuvers on the kickoff and defensive set-ups against the more common offenses.

Ray "Bear" Wolf of North Carolina discussed the technique of defensive and offensive line play. With the able assistance of Johnny Vaught, assistant coach at North Carolina, Drew Ellis and Wilson Grosecloe, all of whom were fine linemen at Texas Christian U., Wolf covered at great length the situations that linemen come up against on those difficult Saturday afternoons.

Coach Howard "Red" Drew of the University of Alabama favored the school with a graphic picture of the movements and types of blocks used from each position of the Notre Dame formation.

Cherry gets college berth

Blair Cherry of Amarillo (1936 state champion) will move on next fall to the University of Texas where he will serve as an assistant coach under Dana X. Bible. Howard Lynch will succeed Cherry at Amarillo.

The Association elected its officers for 1937-38 at the annual meeting held in conjunction with the coaching school. The new officers follow: L. C. Wood, Cameron, president; W. B. Chapman, Lubbock, vice-president; and Bryan Schley, Teague, sec.-treas.

J. G. GOOBER KEYES,
Texas H. S. Football Coaches Assn.,
Lubbock, Tex.

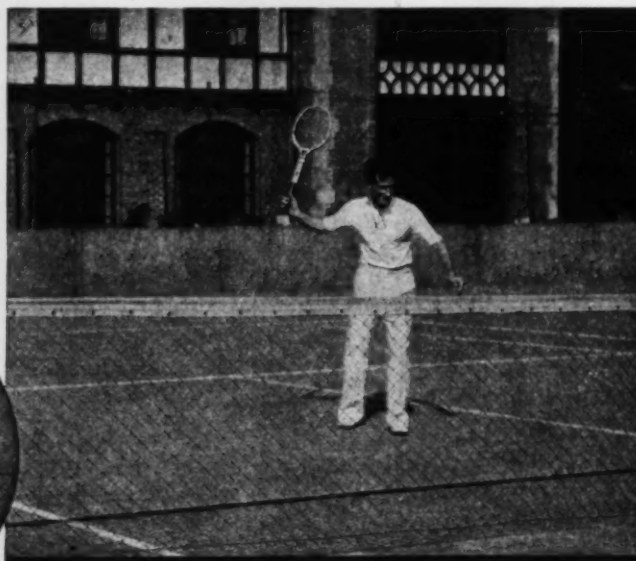


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(Continued from page 7)

ing. A couple of them were guests at his house the night of our visit, and the next morning, when we reappeared to take pictures, three other huskies were on deck. Just arrived: one a Dartmouth man, one a Princeton and the other a Yale. Mr. Mills is very ethical about coaching these rival kickers. For instance, if he has already coached the Princetons, he won't coach the Yales unless he has spoken to Fritz Crisler about it.

By this time, of course, Mr. Mills has permissions all-around, and he is a coach-emeritus on most every campus in the East.

MR. MILLS has had to curtail his travelling in recent years. Too many "urgent invitations" were pouring in on him from the West and the South. He has had to decline most of them, but instead he offers to "have the college come to him." He usually arranges to have the players come over the week-end. If a player is making his first appearance as a pupil, Mr. Mills has him fill out a card. The card is headed "MILLS FOOTBALL KICKING METHOD—Individual Test," and asks such questions as: Are you calm? Nervous? Excitable? Do you get seaisick easily? Do you get dizzy easily? Is your sense of direction good or bad? Do you smoke? Much? Little? Are you a good batter? Tennis? Rifle target? Miss right or left? High or low? Have you an ear for music? Are you right or left footed and handed? Hearing good? Fair? Poor? Ear aches? What serious injuries, illnesses have you had?

Mr. Mills then has the new candidate close his eyes and start walking in a straight line, or what the walker thinks is a straight line. Then he has him, still blindfolded, go through the kicking steps.

From this you can see that Mr. Mills is not one to go off half-cocked. This information is valuable to him, because here is a boy whom he has never seen before, and in the course of one or two days he must correct his kicking faults and get him grooved in the Mills system.

THOUGH Mr. Mills has been in close touch with football all his life, and started coaching his first year out of Princeton, he was

(Concluded on next page)

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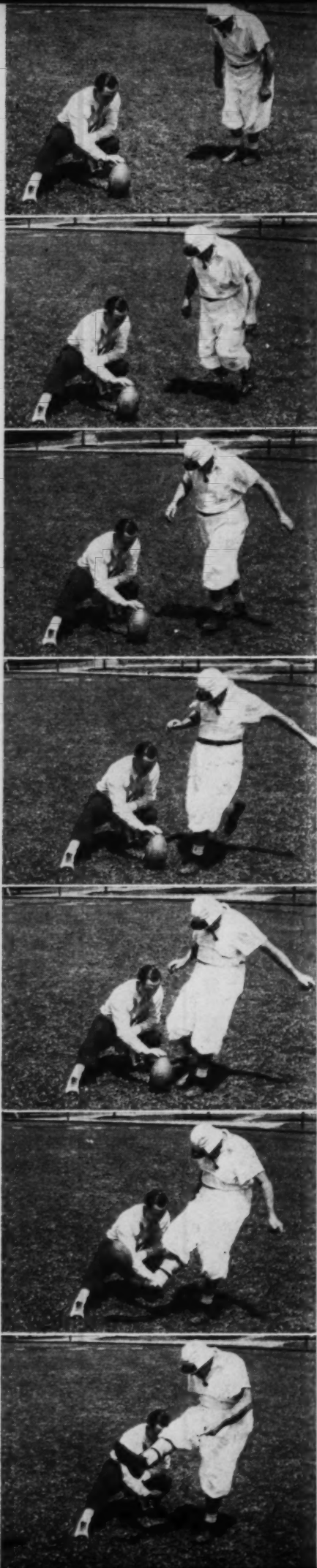
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not a national celebrity until 1931, when his book *Kicking the American Football* made its first appearance.

First year out of Princeton, Mr. Mills coached the Mount Vernon, N. Y., High School team, and stayed with the school as guest coach for twenty-five years. During his first years as coach there he had his hands full, because he was studying law and preparing for the New York State bar examinations.

Mr. Mills' kicking theories were slow to receive recognition, because, in the first place, he did not seek to publicize them until urged to do so in 1931; and second, coaches regarded his theories with considerable skepticism. Knowing

little about kicking themselves, they had a suspicion of any "outside attorney" who held "radical ideas" on the subject.

Today most of this feeling on the part of coaches has been dissipated. Another big factor in bringing Mills the recognition he never sought was the success of Carideo at Notre Dame in 1931. Carideo was one of the "Mills' boys" at Mount Vernon High School.

About that pipe again: we saw the film *Controlled Kicking* the other day, and noticed that the pipe was not in its accustomed place. The Pathe man said that they had asked Mills to remove it. "Some school people might not think it right," the Pathe man said.

Kick It Where You Want It

(Continued from page 12)

of accurate offensive kicking is great because running, passing, blocking and other phases of football have already been perfected by numerous teams, but real kicking has not. It will hold the balance of power between teams playing in their class. Every back should be a trained kicker so as to be a triple threat.

There are kickers who may be letter perfect so far as technique is concerned, but who still fail to punt well under game conditions. Often as not it is a matter of too much imagination. Some of the tests the writer has used to overcome these mental hazards follow:

1. Have another ball passed to him while he is about to kick the one that he has already received from center. This tends to either draw him off balance or draw his eye off the ball, or both.
2. Cross in front of him while he is about to kick.
3. Have the line and the ends run in on him without opposition the instant

he receives the ball.

4. Have a wet, muddy ball unexpectedly passed to him by the center, instead of the dry one he expected.

5. Have him kick from the midst of a crowd with only an opening toward the goal to kick through.

6. Chalk test on kicking foot and ball. In punting mark the under middle seam of the ball and note its contact marks on the foot; in drop and place kicking mark the middle of the kicking toe and note the contact marks on the ball. The chalk should come off the ball on to the foot in punting, and from the toe on to the ball in goal kicking.

In conclusion may I add a private word to the coaches, particularly the high school coaches. Do not neglect the kicking phase of the game, especially with the schoolboy. He is physically immature, undeveloped and growing. He cannot stand long, continuous power drives. Even his older college brother cannot. It is absolutely unsafe and unfair for a lighter team to do so against a power team out of its class. The understanding and use of an intelligent kicking offense will greatly obviate the strain and wear and tear that burns up the schoolboy, particularly in the fourth quarter.

An intelligent kicking game merely does away with the need of sustained 40, 50 and 60 yard drives. It does not diminish the value of a running and passing attack but introduces these two methods of attack from a reasonable scoring distance. The intelligent application of kicking will not take away any of the real football but will make the game safer by counteracting the dangers created by overdeveloped and concentrated power attacks.

(In next month's *Scholastic Coach*, Mr. Mills will be shown in progressive action pictures of the running kick, the drop kick and the multiple kick. —Ed.)

The Place Kick

The versatile Mr. Mills evidently intends to boot this place kick more for height than for distance, for the ball has been only slightly angled. For a long kick of lower trajectory, on a kickoff for instance, the lean of the ball would be more pronounced. Follow the author's head throughout the entire sequence: at no point in the kick does he divert his attention from the ball for a moment; for split vision is fatal to accurate place kicking. One short step brings the kicker into position for the actual contact. The right leg swings back, then forward—not too suddenly or too hard—and the toe contacts the middle seam about two inches off the ground. Note how the author helps his aim by placing that all important left (balance) foot on a direct line with his target. To the boy properly grounded in the fundamentals of kicking, place kicking is solely a matter of practice. Both types of kicking require a fine sense of timing and balance plus a strong ankle and a gifted toe.

The Rules

New N. C. A. A. Guide

The 1937 *Intercollegiate Football Guide*, with its familiar team pictures, records, detachable set of rules, schedules, etc., is ready for distribution. (Order from the American Pub. Co., 105 Nassau St., N. Y., 35 cents.)

The changes in the rules, as summarized in the March, 1937, *Scholastic Coach*, are of minor import. If the kick-off goes out of bounds between the goal lines, no second kick will be permitted as has been heretofore the custom. Instead the ball will be put in play either on the opponents' 35-yard line or at a point 10 yards in from where it crossed the side-line. Both the front and the back of jerseys will be numbered in 1937. The old rules merely suggested this procedure be followed. The rules governing pass interference and the kicking of free balls have been reworded to clear up some of the difficulty encountered by officials in enforcing these rules last season.

In his editorial comment, Walter R. Okeson blasted spring football games, charging that these games are getting away from their original purpose and are becoming more and more formal. "It seems only a question of time," said Editor Okeson, "until admission is charged and we have a spring football season."

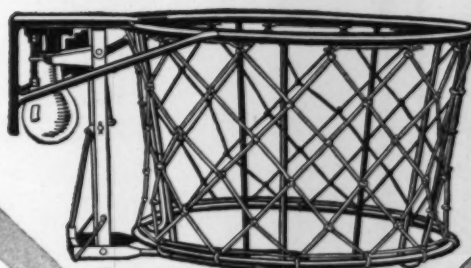
"That such a development would be almost suicidal for football is not open for dispute. . . . Let spring practice develop into a spring season and much of the tense enthusiasm now aroused in the heart of the player and fan . . . will be lost. Moreover, the player who wishes to make the varsity will no longer be able to cut spring practice and give his time to the particular spring sport he favors."

Interscholastic Rules

The 1937 *Official Interscholastic Football Rules of the National Federation of State High School Athletic Assns.* contains 32 changes in the rules, many of major importance.

Several of the more important changes dealing with forward pass legislation follow: The 15-yard penalty for passing from beyond the line of scrimmage has been changed to five yards and loss of down at the point where the ball was thrown; passes handed forward behind the line of scrimmage will not be considered, in the future, as forward passes and the receiver will be permitted to forward pass; any forward pass hitting an ineligible receiver will be treated as an incomplete pass.

Many of the other rule changes are in keeping with the trend away from long distance penalties. (For complete list of changes and interpretations, see the Feb., 1937, *Scholastic Coach*.) In ordering your copy of the Federation interscholastic rules, address the Nat. Fed. of S.H.S.A.A., 11 South La Salle St., Chicago, Ill.



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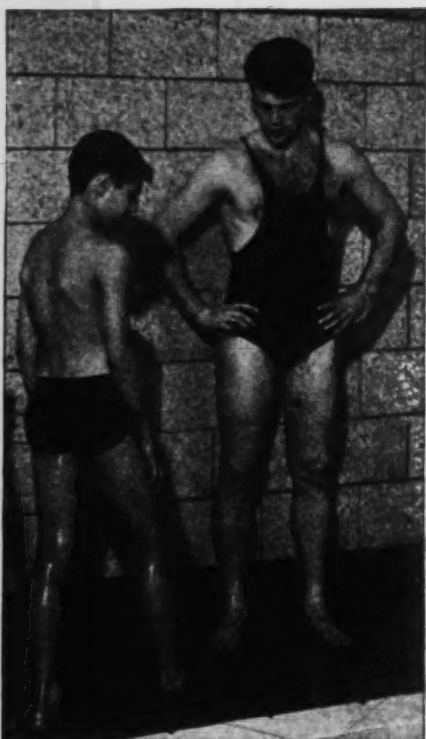


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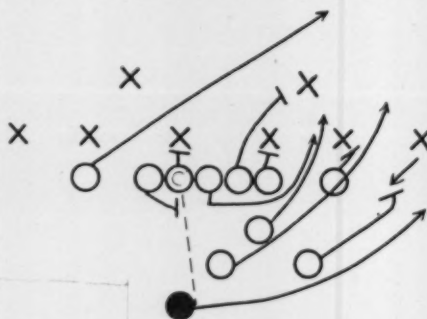
Coaching School Notes

(Continued from page 16)

back, who bears the brunt of the running game. The ideal type for this position should be the fastest man on the team, the cleverest ball-carrier, best passer and a good punter. The wingback is a shade ahead of the fullback and his position can be varied. He must be an unselfish boy who would rather block than do anything else. If he can carry the ball, so much the better for the success of reverse plays.

Lining up behind the center, the tailback and wingback crouch with the elbows resting on the knees. The quarterback and fullback employ a three-point stance.

Backs must time their plays accurately. Each one must be in the right place at the right time. When moving to the right, the backs leave position by stepping off with the right foot, and vice versa when going to the left. One of Minnesota's best ground gainers is the end run outlined in **Diag. 1**. If the defensive



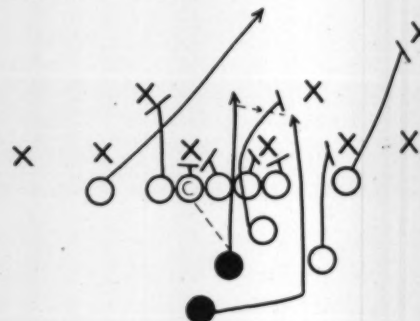
Diag. 1

guard slices by the center, the offensive short side guard stops him. The duty of this offensive guard is not to get in front of the play but to protect the ball-carrier from men breaking through the line. The wingback uses a body block on the end, taking care to drive through the man and not fall to the ground after contact has been made.

Sequence plays

The build-up of plays and sequence play important parts in scoring, touch-downs. The quarterback should always have in mind what he is going to call next, and have a clear view of the end toward which he is building. Plays picked at random are rarely as effective as those selected in sequence. Passes should be tied with running plays, and running plays with reverses and spinners. The entire defense cannot be fooled on a play. A play is set-up to deceive only one or two opponents: therefore, the deception must move fast as you can only deceive the men for a certain length of time. Forward passes should be considered as regular plays not merely a last resort to score, nor should they be thrown three or four

times in one series of downs. Lateral passes are optional but should be aimed at a definite receiver. Laterals should not be thrown at any time or any place, but only when the situation is absolutely safe. The tailback in **Diag. 2** acts as a floater on this play. He fakes a run to the right, recovers and moves down-field for a lateral.



Diag. 2

Notice the short side end in both this diagram and the preceding one. He does not block the defensive halfback on his side but crosses the field and gets in front of the ball-carrier. Minnesota spends a great deal of time on down-field blocking. Once the ball-carrier gets past the line of scrimmage, he seldom misses getting every possible yard. The three don'ts of down-field blocking are: (1) don't telegraph, (2) don't lunge, (3) don't take off too far from opponent.

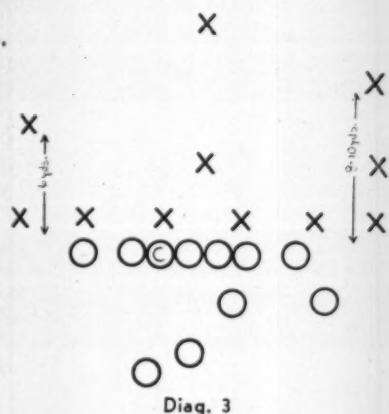
Open-field blocking must be higher than the blocking in close quarters. Contact should be made high and the blocker should drive on through. The ball-carrier can get the most out of his running by following the head of the blocker and cutting the right way at the right time. A good blocker can make a fair ball-carrier look good, and a poor blocker can make a good ball-carrier look bad.

Defensive theory

Bierman uses a set defense with only slight adjustments in technical situations. His linemen never guess what is coming next but are set for any type of play. The trend is definitely away from a seven-man line. Bierman uses a six-man line with the short side end occasionally dropping back to leave only five men on the line. This is done especially near the side-lines.

The idea in the line is to start charging on the snap and getting across to the offense quickly. They work on the theory of "play, then look." The linemen work in fast and slide toward the ball-carrier. There should be no tendency to slide parallel to the line before crossing. A low fast charge is used with the aid of the elbows, and linemen are warned to keep their legs free of opponents at all times. Hands are used when needed, but this tends to slow up the defensive man. One idea always emphasized by Bierman is not to give

up but to keep coming in. Motion pictures of Minnesota games often show as many as five or six men converging on the ball-carrier. Linemen should not only take care of the territory in front of them, but should help each other out.

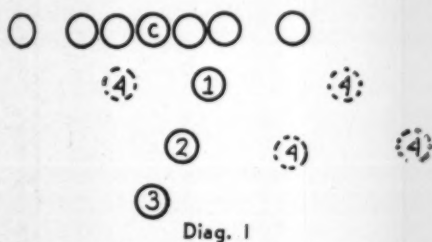


In contrast to the line, the backfield first "look, then play." The idea is to close in against the opponents' strength and to loosen up on the weak side. **Diag. 3** shows the defense against an unbalanced single wingback. This defense can be called a 6-3-2 or a 6-2-2-1.

Matty Bell

By Emil Hutto
Canyon, Tex., H. S.

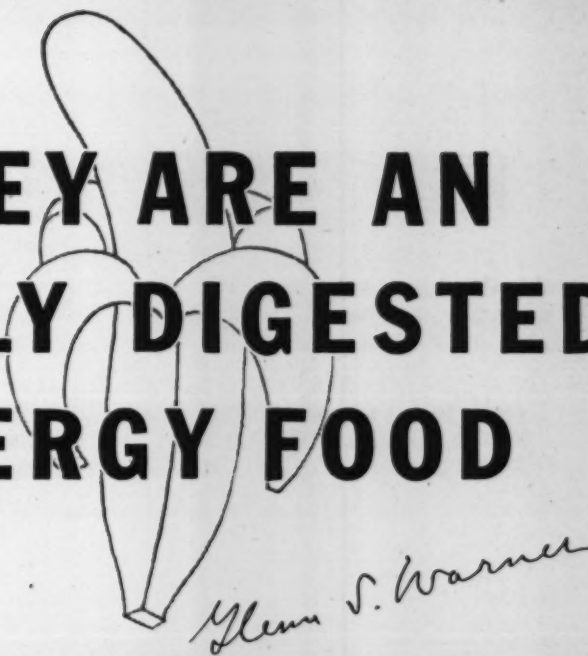
BY building up his plays in sequence and artfully mixing a tricky running attack with cleverly masked forward and lateral pass plays, Matty Bell has evolved his own particular brand of the wide-open game prevalent in the Southwest, which he outlined in detail at the West Texas State and Northeastern University coaching schools.



On offense the maestro of razzle-dazzle uses a modified single wingback with a balanced line and both ends split about a yard out from the tackles (**Diag. 1**). The 1 back is used almost entirely for blocking; 2 must be a good ball-handler, spinner and line bucker; and 3, the tailback, is a shifty ball-carrier, passer and punter. Bell, by three variations of his regular formation, uses the 4 back from four different points in the backfield. The 4 man can be shifted freely without changing another back's assignment, by adding an "X" or a "Y" or some other symbol to the regular signal. **Diags. 2, 3 and 4** show

(Continued on page 37)

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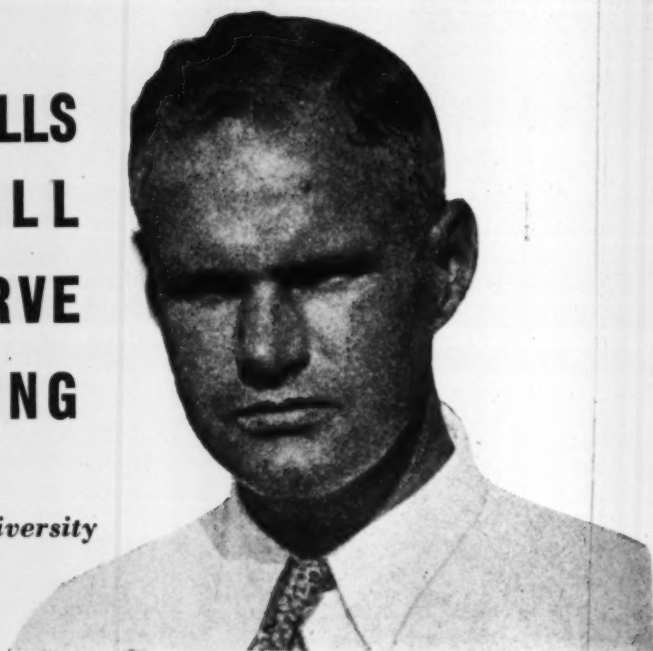
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Carl E. Snavely, Head Football Coach, Cornell University



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"In the first place, nine hours of sleep is about the right number for high school students who participate in vigorous team sports. It is better to get this sleep early in the night rather than late in the morning. What ordinarily is termed 'staleness' is usually nothing more or less than fatigue, and this can be avoided with sufficient rest.

"Tobacco in all of its forms is decidedly and unquestionably harmful and all types of alcoholic beverages should be completely avoided. The athlete should abstain from these things throughout the entire year. I believe it is inadvisable for a high school student to drink coffee or tea, because stimulants when taken at night increase restlessness and prevent the good, sound sleep at night that is of tremendous importance.

"Great care should be exercised in selection of food. The coach or athletic director who suggests menus is in a good position to plan them with the individual student in mind, as it is difficult to set definite limitations which will apply to all athletes.

In October

DANA X. BIBLE

Director of athletics and head football coach
of the University of Texas

will continue discussion of the question:

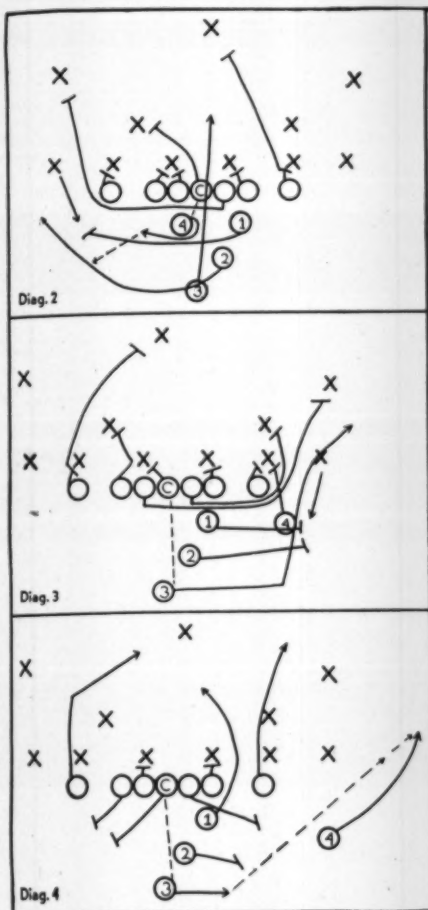
**"WHAT DOES A COACH MEAN
WHEN HE TELLS HIS SQUAD IT IS
IMPERATIVE THAT EVERY ATHLETE
OBSERVE TRAINING RULES"?**

Some sweets and pastries can be indulged in without harm, but the amount should be carefully chosen. Soda fountain beverages are not particularly harmful, but are not as healthy as the beverage made from natural fruit juices.

"When an athlete is drowsy in the afternoon, when there is a general feeling of laziness on the field or in the classroom, too much food is being consumed. Every student must determine the amount of food he needs, and which can be assimilated to best advantage. Good condition is directly dependent upon careful selection of food, and here, too, the activities of the athletic director can be of great value in guiding the preparation of menus as well as the exercising of muscles."

(Continued from page 35)

three plays with the 4 back starting from different positions. In **Diag. 2** he is in an excellent position to handle the ball on sneaks and laterals. He helps the right end block the defensive left tackle in **Diag. 3**, and in **Diag. 4** he floats out to pull in a forward. Spot passes thrown to 4 from this formation can be completed without great risk of interception.



Diags. 2, 3 and 4

The three plays emphasize the versatility that must be the back's who plays the 4 position.

A Bell-coached team employs 30 or more plays during the course of a game. He insists that the plays be run off in sequence, each play being a build-up for another. His system is intelligently conceived and **Diags. 5, 6 and 7** give a clear picture of the deception for which Bell strives. In the first play, the 2 back receives the center snap, fakes to 1 and hits directly over his right guard. In the next play, he again fakes to 1 but cuts this time between his right tackle and end. The lateral pass to 3 is optional. The 2 back, in the third play, really slips the ball to 1 who promptly laterals back to 3. The play is completed with a forward pass from 3 to 4.

Pass receivers, advises Bell, should run from the waist down, keeping

(Continued on next page)



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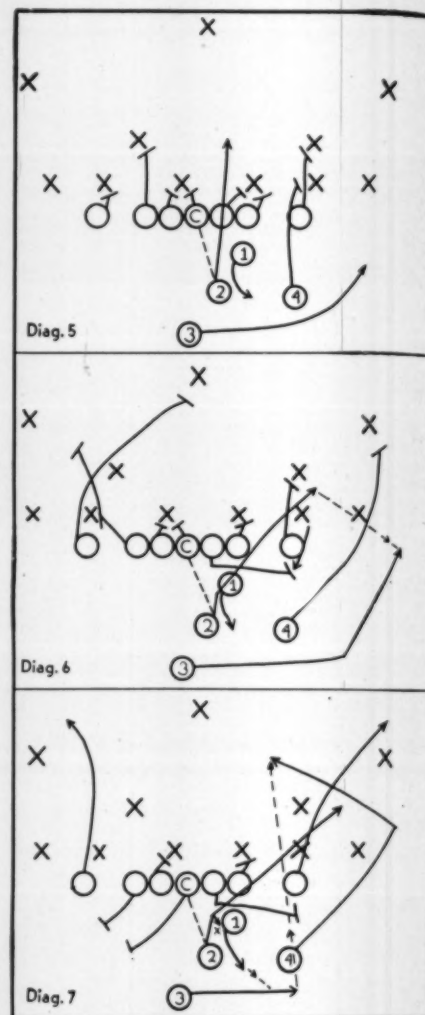
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the hands up near the chest and the entire body completely relaxed. The thumbs are held close to the other fingers and the ball should be caught out in front. This affords the receiver a better chance to hold on to



Diags. 5, 6 and 7

the ball if the defensive man hits him. (This applies to short passes.) A passing drill is outlined in **Diag. 8**.

Finger signals

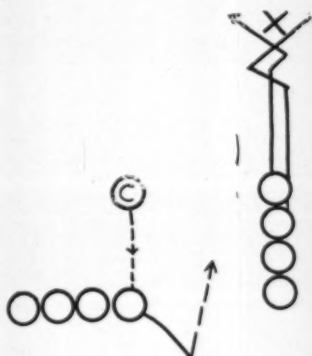
The pass receivers tip off the passers as to which way they are going to cut by using finger signals. One finger means "O" is going to cut outside after faking "X" to the inside; two fingers if he is to fake to the outside and cut down the middle; three fingers if he is going to double feint (inside, outside and then go inside); four fingers for the reverse of three; and five fingers is the signal for a "come-back" pass in which the receiver goes down the field and then heads back.

When passing it is important, of course, to discover just how the defensive team is covering. In an early play Bell has his 4 back run laterally for 12 to 15 yards and then down the field. It is the quarterback's duty to

detect how the defensive backs commit themselves and call his pass plays accordingly. Pass, suggests Bell, when the opponents least suspect it and after making a substantial gain on the first down—taking into consideration your position on the field.

Contrary to popular opinion, Bell believes that a five-man line is more effective against a running attack than a passing attack. His Southern Methodist team proved this in 1936 by passing consistently for good gains against Fordham's strong defense which featured a five-man line.

Bell is decidedly lateral pass conscious and instructs his backs to lateral pass with impunity, when cut off by the defense. Linemen and backs block until the ball-carrier is in the open or until a pass is completed, then trail the ball-carrier as prospective lateral pass receivers.



Diag. 8

Points on defense

When shifting to meet the offense, concentrate strength on the line either to the right or left and shift the backer-ups just the opposite to insure defensive balance. Hand play is effective when the defense is set up in a seven-man line, but playing in a five- or six-man line, the linemen should drive in low and make less use of their hands. Method of play should also vary according to the down and yards to go. More hand play is permissible when the offense has big yardage to cover than in situations where they have but few yards to go. With short yardage needed for a first down, the defense should hit with the forearm and shoulders, driving them under and bringing them up. The tackle who finds himself in trouble all afternoon should be forced to play low. Submarining, in which the linemen have to keep close to the ground and come up under the offensive men, is effective for goal-line stands. Against an attempted mouse-trap, the lineman should drop low and face in.

After making his initial charge, the lineman, if the play is not coming at him, should fade and hustle to the point of attack. The tackle should play with his right leg nearest the man he is working on, and at the snap takes a

(Concluded on next page)



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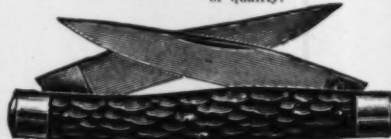
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short jab step on the right foot toward his opponent. He then comes up with the rear foot while hitting with the forearm, knee and shoulder. Ends should keep their outside foot back on contacting offensive backs, to facilitate a pivot to the outside if the play sweeps wide. A clever wing will feint occasionally and mix up his charge.

When the defensive ends are light and the opponents are using a double wingback, a 6-3-2 alignment will probably work out best. Against the wingback who tries to take him, the end drives in fast, wards off the back with his hands and forces the play in. While the weak side end smashes directly into the play, the tackle hits first, looks and then goes.

On kicks send in the tackles with arms held high, not so much to block the kick as to worry the kicker. If the punter is a particularly long one, concentrate on returning the kicks. By using only five men on the line when the situation obviously calls for a kick and having the extra secondary make doubly sure of cutting down the ends, quick and long returns are made possible. The long kicker who is slow in getting off his punts should be rushed.

Practice Plan

(Continued from page 18)

of offense and defense that will be used by opponents during the coming season.

Sixth week

Prepare a special offense against a zone defense. Speed up offensive tactics and work equally as hard on defense. Stress footwork and defensive fundamentals. Plenty of time and attention should be given to defensive rebounding under pressure, with the rebounders getting the ball out quickly to the outside men.

Special maneuvers, such as advancing the ball against a pressing defense, should be planned and practiced. Work on set offenses may be continued in a dummy scrimmage with the defensive team fast breaking when the ball is obtained. It will be to the advantage of a team to practice a five minute stall or time-killing game. The coach may compose a knowledge quiz on situations set up by himself in regard to game strategy.

Additional work

To the above the coach may add out-of-bounds and jump-ball plays, if he puts much stock in such plays. It is important to have frequent individual sessions with players to discuss weaknesses and strategy.

To avoid the factor of staleness, the practice periods must be varied, interesting and not too long.

New Book

TRACK AND FIELD ATHLETICS.
By George T. Bresnahan and W. W. Tuttle, Ph.D. Pp. 497. Illustrated—drawings and tables. St. Louis: The C. V. Mosby Company. \$3.25.

WHEN daddy was a boy in short pants, the order of the sweater and sneaker used to roam the streets chanting worshipfully, "Tinkers to Evers to Chance, ahhh." George T. Bresnahan and Dr. W. W. Tuttle are a far cry from the famous old double play combination, but they too are a smooth-working pair. The two University of Iowa men do not operate on a slap-bang basis, but their book is all the more valuable because of it. It has been compiled methodically, painstakingly and what is more unusual, with an eye carefully peeled for the anatomical and physiological implications of track and field. That the authors are in a position to speak with authority is manifest by their backgrounds: Bresnahan is track coach of Iowa, an assistant professor of physical education and has long been active in the field of tests and measurements; Dr. Tuttle is an associate professor of physiology.

The authors take perhaps elaborate pains in handling the fundamentals of each event, but as they state in the preface, "In presenting this book, the aim . . . is to place in a single volume material which is adequate for developing the beginner as well as . . . the advanced athlete . . . we have attempted to present them (phases of form) in a clear, orderly sequence so that the beginning high school student as well as the college athlete can follow the discussion."

The authors have also included in their opus valuable, detailed chapters on physical aids for the track and field athlete, preliminary season preparations, tests for building and maintaining a track and field team, and recent advances in the study of track techniques. The glossary in back of the book is one of the most complete of its kind.

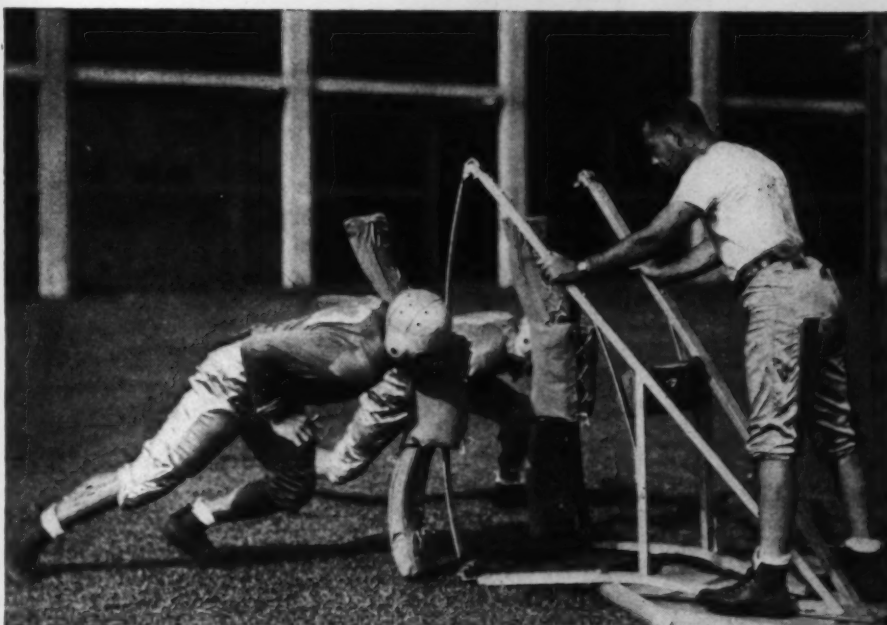
Conspicuous in its absence is the wealth of photographs usually found in works of this kind. Most of the Bresnahan-Tuttle illustrations have been borrowed (with permission, of course) from David Holmes' "Movies on Paper," a study in pen and ink drawings of famous track and field athletes in progressive action strips.

However, there is one photograph in the book. On the very first page is a shot of George J. Saling, University of Iowa, winning the final heat of the 110-meter high hurdles at the 1932 Olympic Games in Los Angeles. Turning over the next page you see the following inscription: "To George J. Saling, July 24, 1909 . . . April 15, 1933."

Winning Teams

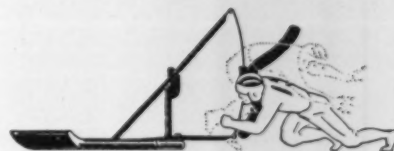
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By Edwin S. Lewis

Edwin S. Lewis, a graduate of Springfield College, is director of physical education and coach at Mexico Academy, Mexico, New York.

A STALE or sluggish athlete is a pretty useless one, and the alert coach is ever watchful for the signs of this condition which, if it goes too far undetected, may seriously affect the future health of the player, and will certainly reduce the immediate strength of the team.

A stale athlete may be defined as one who lacks drive, who is making repeated errors where he would not have made them before, who seems to be losing interest in the proceedings, playing and practicing indifferently and even carelessly.

Overwork in practice, fatigue, improper eating, some real organic disorder, lack of sleep, monotony, too many games in a short span of time, nervous strain and anxiety brought on by trouble at home or in school work—all these can play a part in reducing the efficiency of the athlete. Before the coach can help the athlete out of his condition, he must be able to locate the seat of the trouble. The first thing to do is to inquire of the athlete himself what the trouble is. If he doesn't seem to know, and you have gone over the possible causes with him and he still says that none of them apply, the next best thing to do is to excuse him from practice for a day or two, or lighten his work considerably. If he still does not snap out of his sluggishness, it is time to have him examined by the school medical officer. Ordinarily it is not necessary to do this, for most players need only the lay-off or let-down.

Monotony and fatigue

It may be that they could well benefit from a let-down in another direction: I am thinking now of the boy who may be working too hard at something besides athletics. A part-time job, especially if it involves doing something which bores him, may sap too much of his energy. It may not be a job of physical effort mainly; it may be something that requires long mental concentration, night after night. Heaven forbid that I should so much as suggest that our athletes are studying too much. But a stale athlete might possibly be the victim, not so much of over-study, but of too monotonous study. A certain subject may have him down, and he may be spending himself unduly in a conscientious effort to suc-

ceed in a direction in which he can make little headway with his present equipment. This may be one of many explanations of his plight. That is not our concern here. What interests us is the fact that effort that is chiefly mental may be degenerating if monotonous.

It must be borne in mind that the special functions of the brain have separate centers. When certain of these centers are working continuously, monotonously doing the same thing day after day, it is physiologically inevitable that they should tire more easily than when work is sufficiently varied to call upon other centers in turn.

Physiological basis

Monotony has a real physiological basis and is instrumental in inducing fatigue. With repetition and sameness of use, there results fatigue of the muscle or of the organ used and the nerve centers from which our motive power springs also becomes fatigued. Fatigue of this type induced by monotony often leads to more injuries than fatigue through muscular exertion. As fatigue sets in, neuro-muscular units are affected. Responses may differ, but unquestionable effects are made upon the central nervous cells. It is particularly important to avoid fatigue in growing boys and girls, and especially in those of a less robust nature, because of its incident toxemia. This is due to the production of waste material having an acid reaction, which has to be neutralized rapidly from the alkaline supply of the body.

The maintenance of this high alkaline reserve is essential to the proper functioning of the body and is doubly important during the growing years because of increased demands during that period. Therefore, the lowering of this reserve is a serious matter, and should be carefully avoided by the supervisor. Ignorance of this fact keeps many an unfortunate child at low ebb and makes it impossible for him to store up any reserve power. In this way his endurance is limited, his immunity to infections is reduced, and his organs are unable to function properly.

Signs and symptoms

An athlete should be able to recognize the symptoms of staleness. To be listless and sluggish in the morning after eight or nine hours sleep is

a possible sign of staleness. Your hours in bed should be refreshing. If meals, particularly lunch and dinner, are consumed without any enjoyment in the food, the training has probably become too much of a grind. Lack of interest in practice, very little ambition or initiative, and that continual tired feeling are danger flags which the player himself may recognize more readily than the coach.

A coach is handicapped in diagnosing a case of staleness by not knowing the inner feelings of the player. Therefore he must make use of certain visible signs in the player's appearance and actions. There are several of these. The common ones, requiring only observance, are as follows:

1. Eyes sunken, due to loss of fat beneath them.
2. Face pinched.
3. Carriage bent and appearance dejected.
4. Peevish, distrustful, aggravated by little things.
5. Appetite poor.

Loss of weight, unless accounted for by diet or exercise, may indicate approaching staleness. Weight lost during exercise should be replaced within 24 hours. Loss of weight during exercise bears no relation to condition if the recuperative powers are good.

Prevention

The coach who recognizes the first signs of fatigue and relieves the player temporarily has taken the first and biggest step toward avoiding staleness. Coaches are well aware that physical condition is essential to skill. Many coaches advocate a big reduction in the amount of scrimmage work, believing that too much contact work produces a subconscious aversion to it, resulting in staleness. In sports with little or no bodily contact like tennis, baseball and swimming, the practice sessions should not be made too long as to become boring. There must be enjoyment in the game and in the practice.

The simple cases of staleness are best treated by rest, a change to some light recreation, walks in the fresh air, and a sympathetic interest on the part of the coach in the "patient's" attempt to recover. A massage might make him feel better. Staleness is certainly not a condition that can be massaged away, but massage—particularly on an athlete who rarely receives massage—has a psychological effect, and besides it does aid in the elimination of waste from the muscles.



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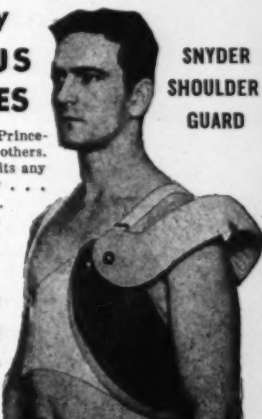
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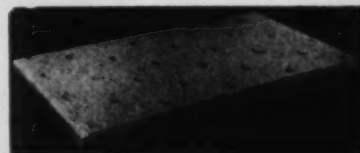
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MAKING THE PIGSKIN PAY

By Ralph E. Hensley

With the local high school \$1,200 in the red last year as a result of several poor football seasons and an outlay for lighted field fixtures, Ralph E. Hensley, city superintendent of recreation of Chico, Calif., was called in to direct a campaign to build up the gate. By conducting the drive along the following big business lines, Hensley succeeded in quadrupling the gross from the preceding year and paying off all the debts.

WITH football appealing so strongly to the imagination of the public, schools that maintain teams expect the returns not only to justify heavy maintenance costs but to contribute to the upkeep of the entire athletic plant. And properly nurtured the pigskin can be made to pay. All the school must do is follow the rules of pigskin nutrition.

It takes two key men to put over a "make football pay" campaign. Neither is the coach. The first man will direct the drive and it will be his duty to write newspaper copy and make the general public football conscious. Just as important to the success of the drive is his partner, the prominent business man. The latter, a local merchant perhaps, cements the bond between the community and the school. The merchant who was a halfback in '15 or who has a son out for the squad will often welcome an opportunity to serve on the committee. The finance faculty member, the coach, the director of athletics (who is expected to handle the game administration), and the faculty member (or his assistant) in charge of student activities complete the pigskin nutrition committee. Each has a definite part in the feeding and each is dependent upon the others.

Launching the drive

The committee should not wait until the fall to swing into action. Start planning in the spring. At a general meeting, the chairman for the revenue drive can be selected and dates set for curtain-raising publicity and the pre-season football dinner. Make all the necessary arrangements for the dinner at this time, including advertising, invitations and program. This banquet has a definite place in the drive—creating initial football enthusiasm. By shrewdly arranging the dinner for the evening before the season ticket drive, ticket sales may be stimulated. The business committeeman can take the floor and urge the guests to assist in the drive.

The director swings into action with the initial call for candidates. The newspapers are naturally the most fruitful field for publicity, and the publicity man turns in copy—mostly anticipatory in nature—at the rate of at least once a week for the three weeks preceding the opening of the season. The subject matter during this period includes the schedule, new fixtures, new men expected out, old men lost, and any combination of these materials.

As the regular practice sessions are inaugurated, copy becomes comparatively simple but much heavier. With game time drawing close the pressure on the publicity director is greater, as copy is turned in to the newspapers three times a week.

Expenses

In order to make money, you naturally have to spend some. In the long run it will pay to lay out money for colorful posters, slides at the local theaters announcing games, banners over the town, and rental for a truck equipped with a loud speaker.

While the average high school cannot afford to reproduce the pageantry put on by colleges during the half, they should not hesitate to plan some form of half-time entertainment. An intermission without something to observe or hear is deadly to customer return. It doesn't take very much to fill in a pleasant fifteen minutes. From the ranks of the student body, volunteers may be recruited and organized into musical, tumbling or dancing units. Or an archery, track and field or physical education demonstration can fill in just as well. With proper supervision, the small boys of the town can provide excellent entertainment in the form of an impromptu football game.

Game management, heretofore considered only routine, plays an important part in customer return. Well-lighted bleachers, safe stairways, clean toilets and controlled crowds are important to spectator comfort and create a favorable impression. Getting the game started on time, curtailing of over-announcing on the sound system and keeping the field free of non-performers are minor ills that are often overlooked.

Nurturing the pigskin is hard work. But if the feeding is conducted in the same manner as good business, the pigskin will get fat. And it will pay.

Keeping Them Eligible

By Robert C. Antonides

How many games did you lose last season because some of your key players were languishing on the side-lines as a result of academic deficiencies? What did you do about it? Here Robert C. Antonides, football coach at Morgan Park High School, Chicago, Ill., tells about the old system he scrapped and the new one that's working with better results all the way around.

A COACH always faces the prospect of seeing a fine team wrecked by the failure of some of its members to remain eligible. As poor scholarship does not prevent a student from participating in most of the school's other extracurricular activities, the problem of eligibility is more vital to the coach than to the other teachers of the school. As a result most coaches have developed some system of keeping athletes eligible.

In almost every school there are some teachers who make allowances for the athlete, some who make no allowance and a few who seem to make it tougher for the athlete. Many coaches still young in the field (and the writer went through the same stage), as soon as an athlete fails in some subject, usually call on that certain teacher and try to persuade her into changing the mark. He promises that the boy will study, hand in his work on time, etc., etc. After several of these calls, the grade might be changed.

Undesirable features

This may be a wonderful "system" as far as only eligibility is concerned. The coach may seldom lose any athletes because of failing grades, but the athletic department will probably become more and more unpopular to an increasing number of teachers. Summed up briefly, the undesirable features of this system follow:

1. It creates friction between the class teachers and the athletic department.
2. It is unfair to other students in the class. Often an athlete with lower marks than another failing student will receive a passing grade.
3. The athletes themselves may adopt the attitude that they are privileged and it is not necessary to study because "the coach will fix it."
4. It overlooks the important fact that the failing student is in no way encouraged to do better work.

These manifest ills prompted the writer to look for a different method of keeping the boys eligible. At present we follow a procedure based on a more educative foundation. Our grades

(Concluded on page 47)



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Passing Is Fun

By Earl V. Voris

The followers of Ault High School had little use for their seats when Earl V. Voris was football coach. His teams were coached to play a wide-open game and to lateral pass freely from any position of the field. Voris, now coach of Scottsbluff, Neb., Jr. College, describes some of his early experiences with the lateral pass at Ault.

THE popular conception that the high school player should not be taught complicated plays that require much handling of the ball is usually based on the theory that he is too young and inexperienced to pick up the technique of timing and deft ball-handling. Many high school coaches today, however, insist that ball-handling can be taught just as easy as any other fundamental in football and have not hesitated to put their theory into practice, teaching ball-handling as a fundamental and including a liberal interspersing of laterals in their offenses. While the lateral pass requires a fine sense of timing and expert control over the ball, its use as an offensive weapon has put new life and fun into the game and practice for both coaches and players.

There are three types of laterals: one planned and executed behind the line of scrimmage, another thrown at the end of a forward pass and a "free" lateral in which the ball-carrier in the open field, without predetermination, will throw the ball to any man in a position to receive it. There is comparatively little difficulty in getting the boys to lateral on definite plays. The real job lies in getting them to cut loose with the ball after crossing the line of scrimmage. At Ault we used a drill based on a game situation and designed to give the player plenty of practice in open field lateral passing. At first the players were sent through the drill slowly in order to insure the success of a pass.

After the boys became accustomed to passing laterally, the drill was speeded up and the trailer ran in different directions, making it necessary for the ball-carrier to locate the receiver before attempting to lateral.

The long punt formation type of offense we used at Ault was made to order for lateral passing, a man always being on the outside of all running plays. The line was balanced with both ends one and a half yards out to the side of the tackles. The quarterback took his position about one yard back of the line between his right guard and

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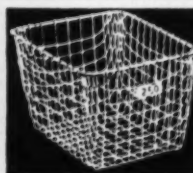
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tackle. The right halfback lined up three and a half yards directly back of the right guard. The left half played four yards back of the left guard and the tailback, or full back, was nine yards behind the center.

Most of our early work in the spring was devoted to fundamentals with the accompanying contact work proceeding very slowly against weak opposition. Moving pictures of the best players in the country were shown to demonstrate perfectly executed fundamentals. At the end of the spring training, moving pictures were taken of the squad in actual scrimmage. These pictures were studied closely and all the mistakes brought to the attention of the players. Over the summer the boys have time to analyze their errors and usually come back greatly improved. In August we sent a letter suggesting light workouts to each member of the squad. Accompanying this letter was a complete outline of the important fundamentals of each position.

Lateral pass freely

Whenever the opportunity presented itself during the season, the team lateral passed from all running plays and passes. The players looked forward to the practice sessions and were out early each afternoon eager to get to work and learn new forward pass plays and laterals. With the monotony of the practice grind eliminated, the boys had plenty of fun with their new plaything, the lateral pass.

Players' Eligibility

(Continued from page 45)

are given at the end of the sixth, twelfth and eighteenth weeks. At the end of the fourth and tenth weeks we send a list of the boys out for the various teams to their teachers, and request that those boys doing poor or failing work be indicated and the list returned to us.

When these forms are returned we make a record of these boys, that shows the subject, the teacher's name and the period the subject is taken. This list is turned over to the students' honorary scholastic club. Members from the club are then appointed as tutors for the failing athletes. Whenever possible the tutors appointed are ones who have taken the subject failed with the same teacher as the failing athlete.

The list is again returned to us with the name and division room number of the tutors. The athlete must then seek out his tutor and make arrangements to meet with him for study and help. The tutor visits the teacher to discover more about the athlete's academic shortcomings and in this way determines the course of action. The tutor helps as long as necessary, sometimes for the balance of the semester. Often three or four weeks of special tutoring will straighten out the athlete so that he can go the rest of the way alone.

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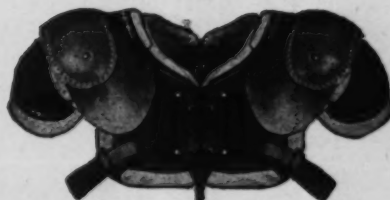


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- ☐ Catalog

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- ☐ Basketball Hints
How many?

HYNSON, WESTCOTT & DUNNING

- ☐ Sample, information

JOHNSON & JOHNSON

- ☐ Booklet, "Aids for Athletes"

KELLOGG'S

- ☐ Information

MAHLER TEXTILES INC.

- ☐ Uniform Cloth sample
☐ Color Chart

MARTY GILMAN

- ☐ Catalog

FRED MEDART MFG. CO.

- ☐ Catalog

MIDLAND CHEMICAL LAB.'S

- ☐ Information on
☐ Gymlosh
☐ Athaloh

NAT. SPORTS EQUIP. CO.

- ☐ Information

NAT. SPORTSMAN INC.

- ☐ Information

NEVINGER MFG. CO.

- ☐ Catalog

O'SHEA KNITTING MILLS

- ☐ Catalog

PAGE STEEL & WIRE DIV. AMERICAN CHAIN & CABLE CO.

- ☐ Folder, "A Better Net"

PETERSEN & CO.

- ☐ Booklet

JULES RACINE

- ☐ Sports Timer Catalog

JOHN T. RIDDELL, INC.

- ☐ Information

SHREDDED WHEAT

- ☐ Additional posters
How many?

A. G. SPALDING & BROS.

- ☐ Catalog

UNITED CLAY MINES

- ☐ Marking sample

UNITED FRUIT CO.

- ☐ Booklet, "How to Make That Team"
How many?

VOIT RUBBER CO.

- ☐ Catalog

WILSON SPORTING GOODS

- ☐ Catalog

NAME _____

POSITION _____ SCHOOL _____

(Principal, coach, athletic director, physical director)

CITY _____ STATE _____

No coupon honored unless position is stated



KEEP IN TRIM

is the slogan we've picked for this natural-fruit drink. High in fruit sugar and preserving all the calorie value of the original juice, Bireley's Orangeade gives healthful energy, contains essential Vitamin C for teeth and bone building.



"Hello, Coach. We're....er...sort of thirsty."

"O. K., boys—just so you stick to Bireley's."

The "sweet" they want and need...in a form that is good for them!

This energizing fruit drink OUGHT TO BE ON YOUR TRAINING DIET TOO!

★ ANALYSIS OF BIRELEY'S ORANGEADE

Ash	0.066%
Fat (Ether Extract)	0.009%
Protein (N x 6.25)	0.18%
Reducing Sugar	1.30%
Sucrose	11.41%
Titrateable Acidity	0.38%
(as Anhyd. Citric Acid)	
Total Solids	13.67%
Calories per 32 oz.	514.36
Vitamin C milligrams in 32 oz.	52.13*
*1 milligram Vitamin C equals 15 International Units	

LET'S see if we can get this story over in a way that will make you tear off the coupon...and sample this orangeade for yourself!

● Everybody we've met so far likes our drink. Our sales are now up in the hundred-million gallonage, proving that real orangeade, a *non-synthetic beverage*, filled a whale of a need in the cold drink market.

● Now we'd like to give you—the athletic director—the facts about Bireley's Orangeade, because there isn't a lot of variety in beverages you can recommend for training-diets. *And because Bireley's Orangeade is healthfully stimulating without being habit-forming.*

● A real "pep" drink, Bireley's Orangeade energizes in a natural, not artificial way. It's almost "instantly digested." A grand drink between the halves—and after practice. A new different drink for your training table. A natural "alkalizer" (for bedtime) that will help the whole school avoid colds and flu this winter!

● Added to that, Bireley's provides sweets in a form that's good for young athletes. That craving for sweets just means, of course, that they need sugar for energy and Bireley's gives them the pure fruit sugar of real oranges.

● Let us see that a big quart of this wholesome drink is delivered to you for sampling. Just mail the coupon and you'll get it—ice cold!

BIRELEY'S, INC., Hollywood, Calif.

SM-58-37

Gentlemen:

Please deliver free quart of Bireley's Orangeade
(Open only to Athletic Directors and Coaches.)

Coach's Name _____

School _____

Street _____

City _____ State _____

! NON-CARBONATED—DAIRY DELIVERED

Prevent Infection



PPROMPT CARE is important in preventing infected wounds; even minor wounds may become infected when antiseptic treatment is delayed.

Mercurochrome, H. W. & D.
(Dibrom-oxymercuri-fluorescein-sodium)

is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Application is not painful. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions during this season when athletic activities are at their height.

After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association has again reaccepted (1935)

MERCUROCHROME, H. W. & D.

(Dibrom-oxymercuri-fluorescein-sodium)



HYNSON, WESTCOTT & DUNNING, INC.

Baltimore, Maryland

A LETTER TO A MONDAY-MORNING-QUARTERBACK

Dear Dad:

Perhaps you're right, Dad...maybe it was Coach's fault we lost that game last week.

But I don't see why you Old Grads get so worked up when we don't win. Coach says that winning games is not the most important part of football.

Maybe that's a new idea since you were in school, but...well, take me for example...

Remember how nervous I used to be? Couldn't sleep soundly, and had no more appetite than a dickey bird? Well, the point is...I'm not nervous any more...I eat like a horse, and I sleep like a top. And do I feel great?

Most of the boys have had some such experience... since Coach got hold of us. A lot of it's due to our diet, I guess. The first thing Coach had me do was cut out coffee and drink Postum instead. A fellow misses coffee at first, but Postum is such a swell drink that you soon forget all about forbidden drinks.*

We may not score as many touch-downs as you want... but we sure feel and look like a different gang!

Love,

DICK

*Recommend Postum to your boys. It is made of whole wheat and bran, roasted and slightly sweetened. Contains no caffeine. Your boys will like its cheering warmth and rich, delicious flavor. A product of General Foods.

FREE! Andy Kerr's new booklet, "Attack in Football." In this interesting and instructive booklet, Coach Kerr has graphically described various systems of attack and the parts each man plays in them, illustrating his text with diagrams showing basic movements.

We will send you—*free*—as many copies of this booklet as you need for your team and candidates. Also *free*, as many trial packages of Postum as you need. Just fill in and mail the coupon.

Postum is a product of General Foods.

GENERAL FOODS, Battle Creek, Mich.

Please send me _____ sample tins of Postum. Also _____ copies of "Attack in Football." S. C.—9-37

Name _____

Street _____

City _____ State _____

Fill in completely—print name and address. If you live in Canada, address: General Foods, Ltd., Cobourg, Ontario. (This offer expires December 31, 1937.)

FOC

[illegible]

● "I'm for Postum . . . it contains no caffeine, and is beneficial to the tired athlete, especially when taken with the evening meal."—LEO HOUCK, Trainer, Pennsylvania State.



● "Postum affords the
ing table beverage
teams."—HARRY A. STU
Football Coach, Wisconsin

ALL WEIGHT

Check your weight daily

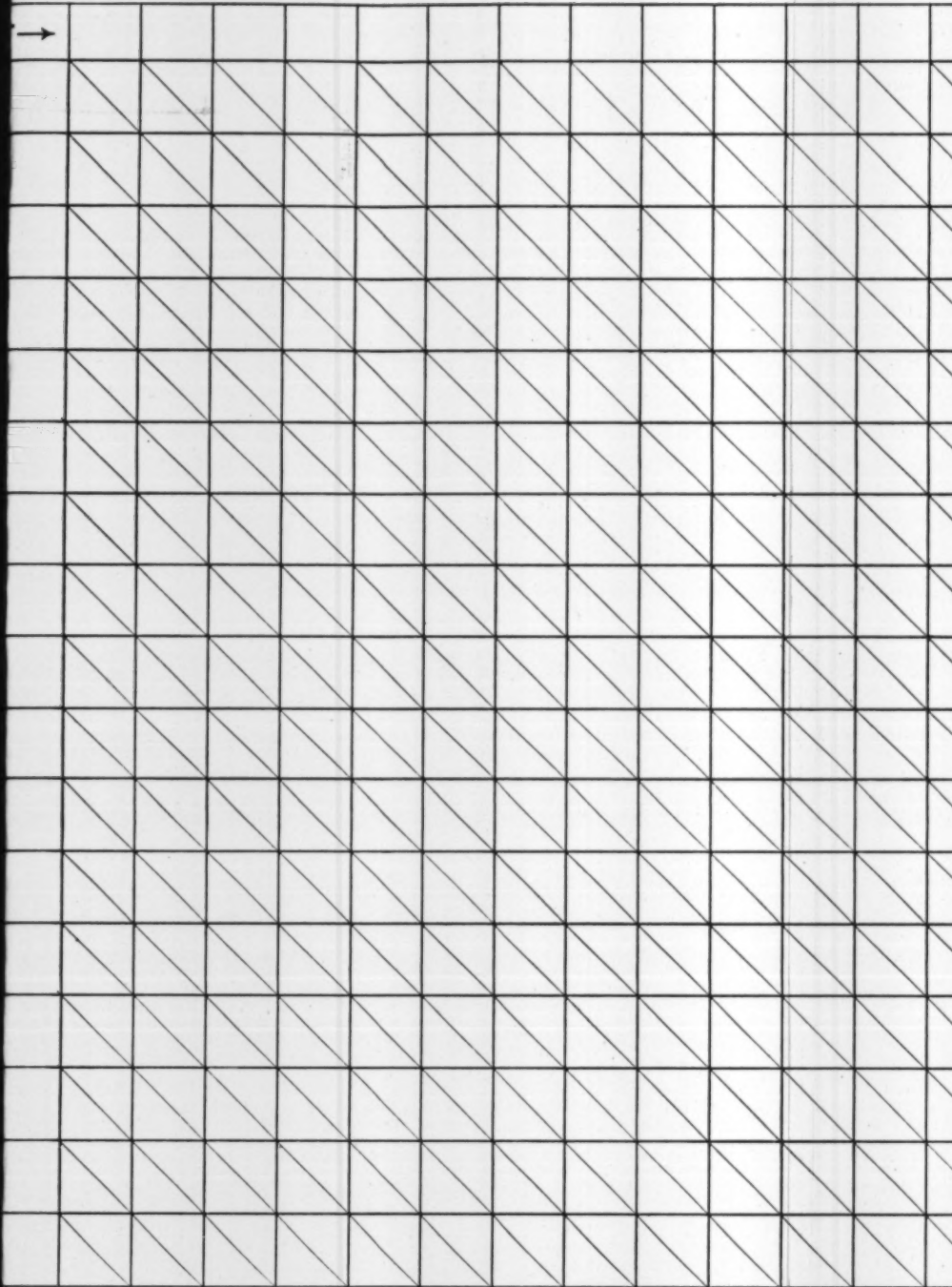
NAME ↓ WEIGHT →

THESE 7 SIMPLE TRAINING RULES WILL HELP YOU KEEP FIT

1. Exercise regularly every day.
2. Sleep at least 8 hours out of 24.
3. Keep out of doors in the fresh air and sunshine.
4. Eat only plain, wholesome food.
5. Drink at least 8 glasses of water every day.
6. Make sure you eliminate regularly every day.
7. Avoid tea and coffee—drink plenty of milk.
Use a warm drink—such as Postum, with meals.

HT CHART

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ULES

esome food.

es of water every day.

inate regularly every day.



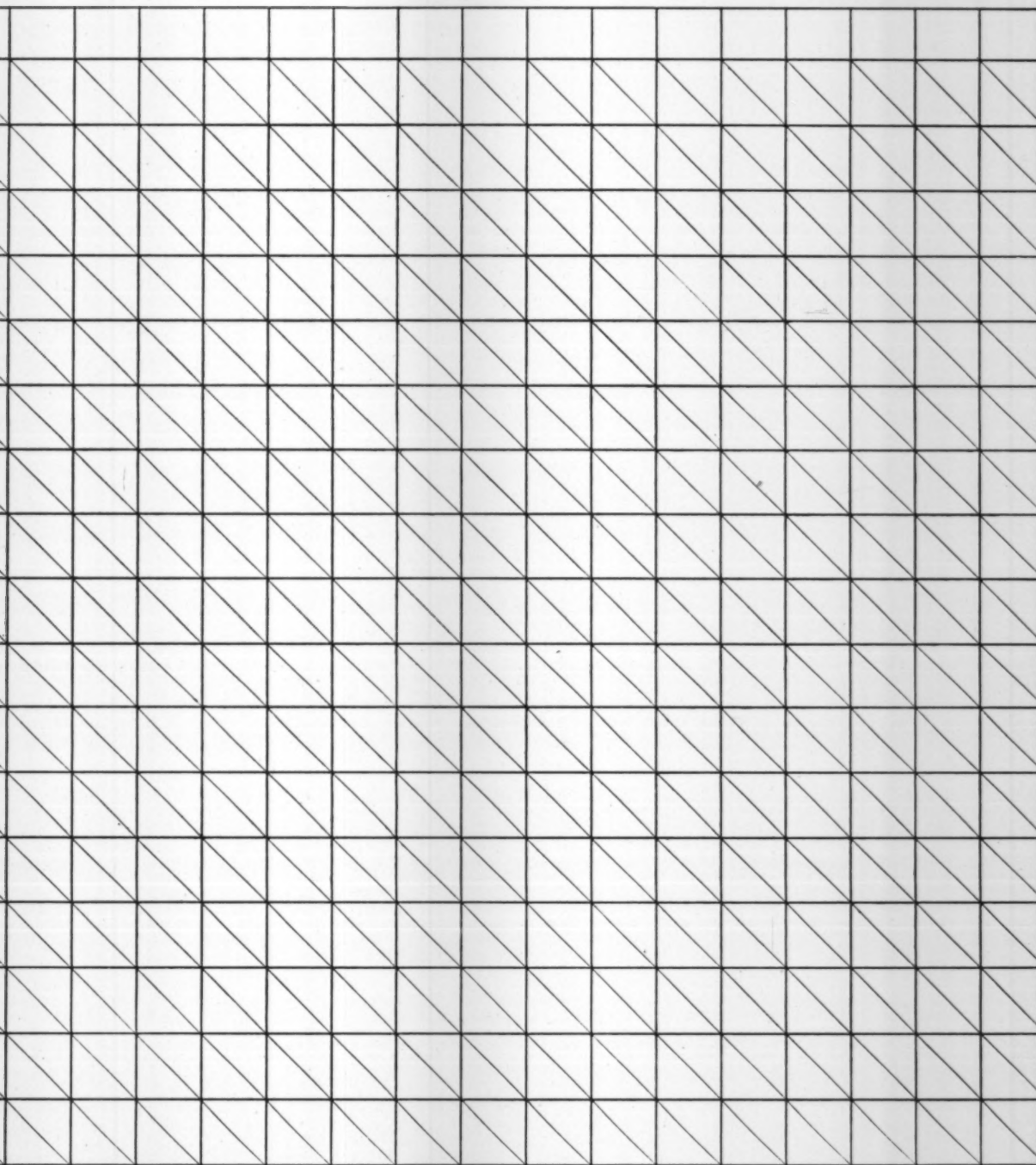
● "Sound, restful sleep is a prime training requisite for any athlete. Postum soothes the nerves and makes restful sleep possible."—HARRY J. MEHRE, Football Coach, University of Georgia.



● "Hot meal-ing season for athletes. B the solution."—ball Coach, U

POST THIS WEIGHT CHART ON YOUR TRAINING ROOM BULLETIN BOARD

IT IS EASILY REMOVED FROM THE MAGAZINE



"Hot meal-time drinks during training season used to be a problem for athletes. But Postum has provided the solution."—JAMES PHELAN, Football Coach, University of Washington.



● "Postum is an ideal meal-time drink for athletes, because it cannot cause any harmful after-effects."—FRANCIS A. SCHMIDT, Football Coach, Ohio State.



● "Postum has all the desired qualities of a hot meal-time drink without any of the harmful effects that can result from caffeine-containing beverages."—WALLACE WADE, Football Coach, Duke University.

IRON MEN AND HOW TO BUILD THEM



By *Glenn V. Warner*

FOOTBALL COACH
TEMPLE UNIVERSITY

An "Iron Man" is a man who can "take it." Size and weight have very little to do with it. For the one big thing that makes an "Iron Man" is *physical fitness!*

Training for physical fitness isn't hard. Habit is the big thing. Occasional spurts of training do no good. You must *stick to it*. On this page I have outlined briefly the basic program I have used in training athletes. It's a simple program ... but it builds "Iron Men"!

SLEEP... Get plenty of sound sleep. Go to bed early...and at the same time every night. If you are actively engaged in athletics, you'll need a little more than 8 hours of sleep.

KEEP OUT OF DOORS... Get plenty of fresh air and sunshine. Be out of doors every day, if only for ten minutes.

YOUR EXERCISE... Exercise properly and regularly. Do your setting-up exercises vigorously and earnestly until you feel a bit tired ... then quit. Don't over-do it. Any of the regular setting-up exercises will do, but choose them so that

each part of your body gets the same amount of exercising as every other part.

HOW TO EAT... Eat at regular hours...and take your time. Chew your food thoroughly. Eat generously of the leafy vegetables. All fruits are excellent. Eat sparingly of rich desserts, pastry, candy, and highly seasoned and fried foods. Avoid spirituous drinks and soda waters containing artificial syrups. A warm drink with meals is desirable, but I try to discourage my football players from using coffee. It is inclined to interfere with sleep, and many coaches now forbid its use altogether.